Week 1 Lab: Separate Accounts and Reliable Backups

If ye are prepared, ye shall not fear. (D&C 30:38)

Please read through the entire lab before you begin, so that you understand what will be expected of you. Then download and fill out the worksheet in the template file

W01 Hands-on Separate Backup Worksheet.dotx

as you work. When you finish the lab, submit your completed template.

Tasks:

1. Create a new secret email account for financial-related communication.
2. Tighten the security of that account with two-factor authentication.
3. Have your bank send email alerts to your new secret email.
4. Make two backups of an important file, one locally and another online.
5. Practice censoring your secret email from appearing in a public document.

Overview

If you use only one address for all your email communication, you put yourself at risk. Most employers do not want you to use your business email for personal communications that aren’t related to your work. But outside of the workplace, do you use one email address for all of your personal digital life?

Specifically, is the email address you use for your financial accounts or online shopping the same as the one you share with your family, friends, church, social media, etc.? If so, suppose an unauthorized person gets access to that email address. Not only could they use it to send spam or otherwise embarrass you in front of your acquaintances and loved ones, but they might also learn about or even meddle in your private financial affairs.

On the other hand, suppose your public chats and private affairs use separate email accounts. In this situation, if a scammer sends a payment alert to your public address, you would be more likely to detect its fraudulence, because it wasn’t sent to your private address reserved for your finances.

For this lab, you will create a secret email account, suitable to use for your financial accounts, including online banking or taxes. This will help separate sensitive email from the other email addresses that you use for work, school, church, or personal communications.

Task 1: set up a separate email account

First, consider: would you feel comfortable using a free email provider, or would prefer a paid email subscription service? Is a free provider \*really\* free, or are there hidden costs or consequences? For a paid provider, what exactly do you get for the money you spend?

A few options for free email include:

* Google (based in US; addresses ending in @gmail.com)
* Microsoft (based in US; addresses ending in @outlook.com or @hotmail.com)
* Yahoo (based in US; addresses ending in @yahoo.com)
* Yandex (based in Russia; addresses ending in @yandex.com)
* Zoho Mail (based in India; addresses ending in @zoho.com)

Some options for paid subscription email accounts include:

* Fastmail (based in Australia; addresses ending in @fastmail.com)
* ProtonMail (based in Switzerland; addresses ending in @protonmail.com)

(Google, Microsoft, Yahoo, and Zoho also have paid subscription email options for individuals and businesses.)

In an upcoming task you will set up two-step authentication for your new secret email account, so keep that in mind and learn whether that is a supported feature as you explore your options.

Actions:

* Choose an email service provider and set up a new email account. Write down the steps you took to set it up. (If you get stuck, try creating a new Gmail account. Start at <https://accounts.google.com/SignUp> and just follow the instructions. Even if you already have a Gmail account, you can create another.)
* Illustrate your write-up of the process by including a captured screen image. (Note: your new email address probably appears in your screenshot. Since your new email address is supposed to be secret, edit your screenshot, and scribble out or obscure your email address, so that it will remain secret. If you get stuck, look below at the appendix for instructions on how to capture and modify a screen image.)
* In case you decide later to stop using this new email account, find out and write down: what is the email provider’s process to close this email account?

# Task 2: Set up two-factor authentication (2FA) and other security settings for your new email address.

If your new email account only requires someone to know a password to access it, it may not be secure enough. A common method is to set up a system in which the email provider sends an unpredictable code in a text message to your mobile phone, which you then enter to complete the second authentication step and access your email account. Another method is to restrict email access to a specific device. There may be other methods as well.

Different email providers will have different processes to complete this step. Learn how yours does this.

## Actions:

* Configure two-factor authentication for your new email account. What kind of 2FA did you set up? (In other words, is your second authentication factor a code sent to your phone, a device authenticator, or something else? Explain.)
* Write down the steps you took to set up your second authentication factor.
* Write about any other security settings you discovered that you can use to lock down your new email account.

# Task 3: Set up alerts to your new secret email address.

Visit the web site of your bank, credit union, financial institution, or online shopping site. Set up email communications, such as delivery of electronic statements, to go to your new secret email address.

Some institutions will even let you set up automatic alert emails for events, such as when a deposit or purchase is made.

## Action:

* Write down the steps you took to set up email alerts.

# Task 4: Back up an important document twice: locally and online.

Find an electronic document that you want to make sure you don’t ever lose. Examples:

* a resume or C.V. that you used to apply for a job
* a transcript from your previous school
* a scan or photograph of your birth certificate or other vital record.

If possible, make a local backup by copying this file to another device, such as:

* an external storage device, such as a USB thumb drive, flash memory, or disk;

-or-

* another computer, tablet, or smartphone.

For your second backup, explore some options for keeping a backup online. Most storage providers will store a limited amount of data for free, and then charge fees if you want to increase the amount you store. Some cloud storage alternatives include:

* Microsoft OneDrive
* Apple iCloud
* Google Drive
* Dropbox
* Amazon Drive
* Nextcloud Files
* …there are many others if you want to search for more.

## Actions:

* Backup your important document to another device. Report the kind of device you used to hold your backup.
* To verify that you can successfully restore your backed-up file, copy it back to a temporary folder, and open the restored file to see that its contents are intact.
* Sign up for an online storage service (if you don’t already have one). Report: what steps did you use to sign up for cloud storage?
* Use your online cloud storage service to make a second backup of your important document. Write down the steps you took to make your online backup.
* To verify that you can restore from your online storage, copy the backed-up file to a temporary folder. Are you able to view the contents of the restored copy of your document?
* Investigate: does your new cloud storage service have a way to automatically synchronize, or in other words, to automatically back up changes you make in your important documents? If so, what must you do make this happen? Include your answers to these questions in your write-up.

# Task 5: Keep your secrets!

Follow these steps to ensure that your new secret email address remains confidential, even after you submit your assignment.

## Actions:

* Before you turn in your assignment, go through your document and make sure you haven’t revealed your new secret email address in your write-ups. For example, if your new secret email address is brighamyoung@gmail.com, replace it with a redaction, such as \*\*\*\*@gmail.com, everywhere that it appears in your write-up.
* Does your new secret email address appear in any screen capture images you included in your write-up? If so, edit those images and erase or scribble over your new secret email address.
* Think about what else could go wrong with your new secret account. Examples:
* if you lose your phone, but you need your phone to complete two-factor authentication to your secret account, is there an alternate method to recover your access?
* if an accident or similar terrible event happens to you, and someone else such as your parents, spouse, or children need to access your new secret account on your behalf, how can you prepare them to be able to do so?

Include your contingency plan ideas in your write-up.

* Finally, reflect on what you learned while working on this lab. What is a new idea or skill that you think benefitted you personally?

When you have completed your worksheet template, save it, then upload it in I-Learn Canvas as instructed.

# Appendix: How to capture and edit a screen image

## macOS

If you use MacOS on an Apple computer, hold down both [command] and [shift] keys and press [4]. (Another way to think of this key combination is [command]+[$].) Your mouse cursor will change and wait for you to draw a rectangle. Click and hold somewhere on your screen to fix one corner of the rectangle, drag your mouse to stretch the opposite corner of the rectangle, and let go of the click button. Whatever was within the rectangle will be saved as a screenshot file to your desktop. Follow the instructions at <https://discussions.apple.com/docs/DOC-8881> to edit that file using the MacOS Preview app.

This is not the only way to accomplish this task. For more ideas, try typing “how to capture and edit a screenshot macOS” using your favorite search engine.

## Windows 10

If you use Microsoft Windows 10 on a PC, use the Snipping Tool, which you can find by selecting Start > Windows Accessories > Snipping Tool. From the menu ribbon, click Mode and select Rectangular Snip, then click New. Left-click and hold somewhere on your screen to fix one corner of the rectangle, drag your mouse to stretch the opposite corner of the rectangle, and let go of the left button. Whatever was within the rectangle will be displayed in the snipping tool. To save the captured image, hold down the [Ctrl] key and press [S], then provide a file name for the saved image. Follow the instructions at <https://office-watch.com/2015/redacting-images-and-pdfs/> to edit that file using Windows 10’s built-in Paint application.

This is not the only way to accomplish this task. For more ideas, try typing “how to capture and edit a screenshot Windows 10” using your favorite search engine.