

Using OneDrive to Sync Fire Incident Data

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During the 2020 Bush fire outside Phoenix, AZ Southwest Team 5 successfully used firenet’s OneDrive to keep a local copy of the incident folder synced across 3 GISS’s and 2 SITL’s local computers. The process uses agency supplied software that should already be pre-installed on agency computers that use the Microsoft 365 environment. This document describes the process in three steps, 1) Setting up OneDrive on your computer 2) Setting up the incident and 3) Syncing the incident down to other computers.

To set up the incident the Lead GISS will need to follow steps 1 and 2. To use the incident everyone else will need to do steps 1 and 3.

Acknowledgements:

Dena Forrer Southwest Team 5

Marie Landis and the GISS group from Southwest Team 3

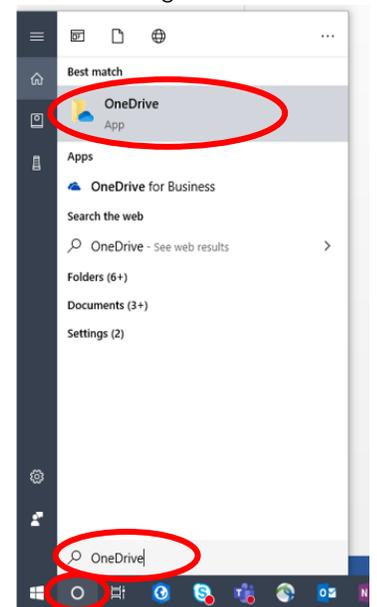
Aaron Seifert - Southwest Team 4

Setting up OneDrive

- 1) Use the Windows search to find the “OneDrive” application. You want the OneDrive app not OneDrive for Business (see figure 1). Launch the OneDrive App.
- 2) Once you open the OneDrive app a cloud icon will show up in your taskbar. It is likely that you are logged into you’re your default agency account. You will need to log out of your agency account and log in with your firenet account (described in steps 3 and 4). If you are already logged out you will see a login screen and you can skip to step 6.

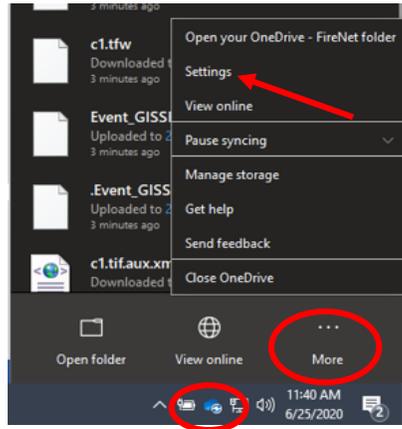


Figure 1



- 3) Right click on the cloud icon, click on the More option (with the ...'s) and Click Settings. See Figure 2.

Figure 2



- 4) In the settings screen click on the Account tab. In the account tab you will see your agency OneDrive account. Click on Unlink this PC. You will get a warning to confirm the unlinking of your account. See Figure 3.
- 5) One you're logged out of your agency account your OneDrive app will restart itself and you can log into your firenet account. You will need to enter the 2-factor authentication code sent to you by OneDrive. See Figure 4

Figure 3

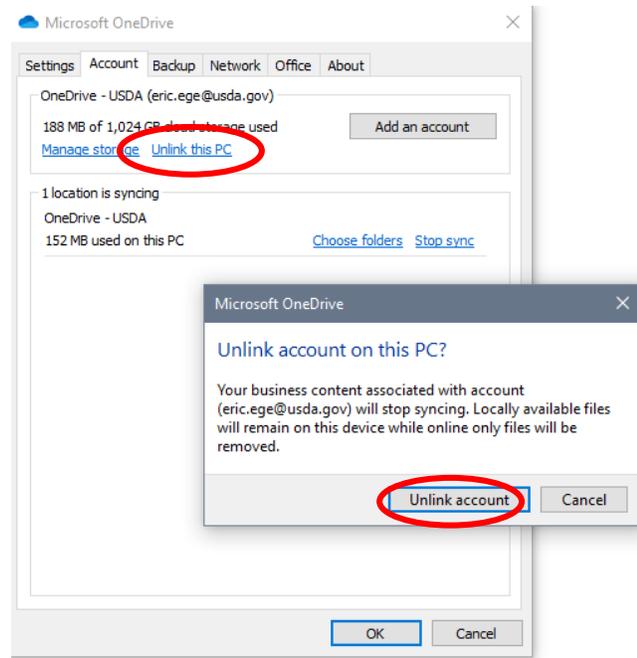


Figure 4

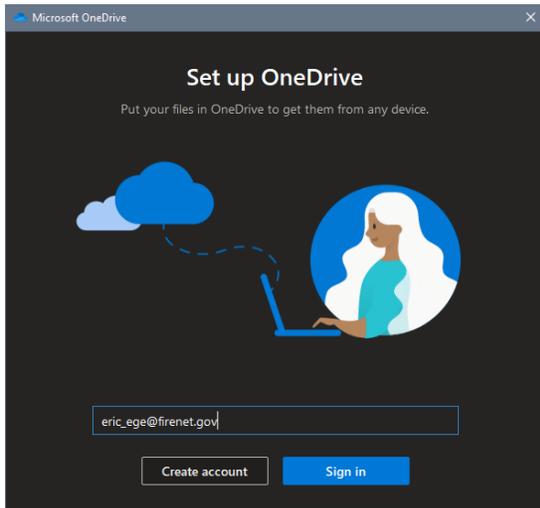
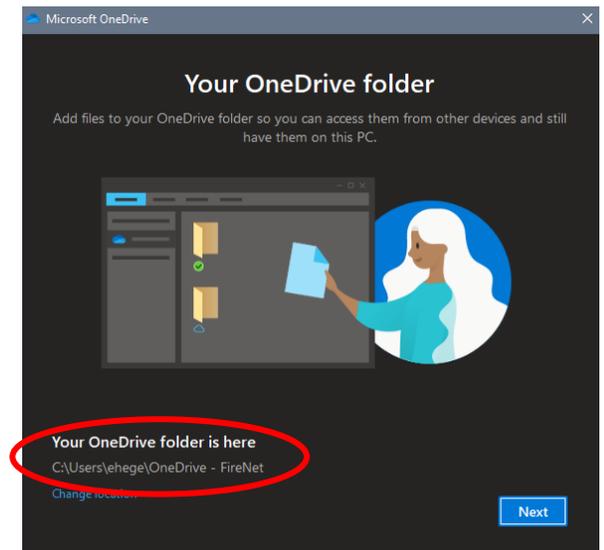
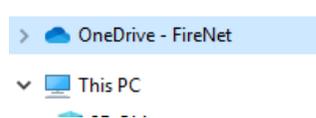


Figure 6

- 6) At this point you will have to click through a few screens. OneDrive will show you which folder it set up on your computer for you (shown in Figure 6). You can just choose the default or change it if you need to. You can click through the rest of the screens and at the end it will open the OneDrive folder for you. Your OneDrive folder will also show up above This PC in the side panel of File Explorer. At this point OneDrive is set up on your computer.



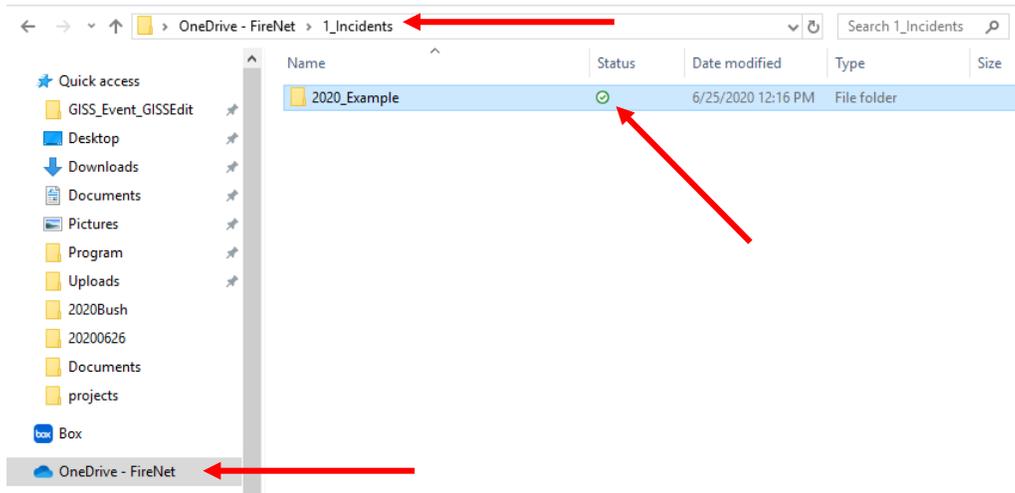
Setting up the incident

Setting up the incident is relatively straight forward and in many ways works the same as you already would set up an incident. This workflow uses the NIFC template incident file structure.

- 1) Open File Explorer and navigate to your OneDrive - FireNet folder. There should be a quick link to the folder in the Side Panel of explorer as shown in Step 6 of Setting Up OneDrive. I use a subfolder called **1_Incidents** to better organize my OneDrive but you can also work in the root folder of OneDrive.

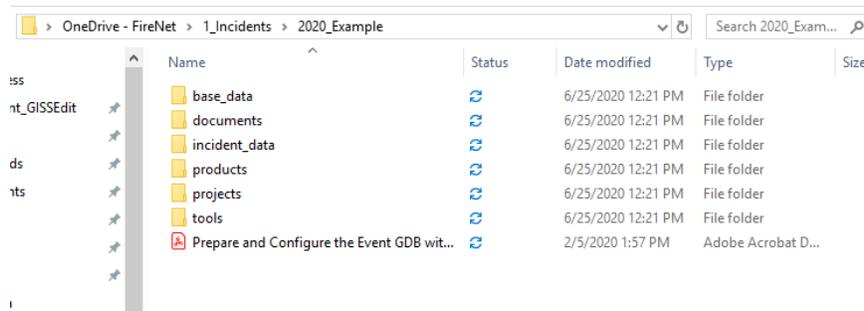
- 2) Create your incident folder using GSTOP file naming conventions (ex: 2020_Example). You will notice the Status column showing the Sync status up to OneDrive. See figure 7.

Figure 7



- 3) Once you have your incident folder created, paste all of the sub folders that come with the NIFC template file structure into your incident folder. Under status you will see blue circular arrows, this indicates that the files are syncing to your OneDrive cloud. When they are completely synced to the cloud you will get the green checkmark again. See Figure 8.

Figure 8



- 4) You can also watch your sync progress by clicking on the Cloud icon in your taskbar which will show you individual files being synced and will provide you an indicator of how much is left to sync. See Figure 9.
- 5) At this point it is recommended to file all the base data you are planning on using into your base data folder. The base data takes the longest amount of type to sync to the cloud and the earlier in the incident you can put it into the cloud, the faster it will be available to other users. This step is optional though as you could also add base data as you go.
- 6) Move up one folder level above your incident file structure so that you can see your incident folder. Right click on your incident folder and click **Always keep on this device**. This will ensure that you always sync down stuff other people are adding to the cloud. See figure 10.

Figure 9

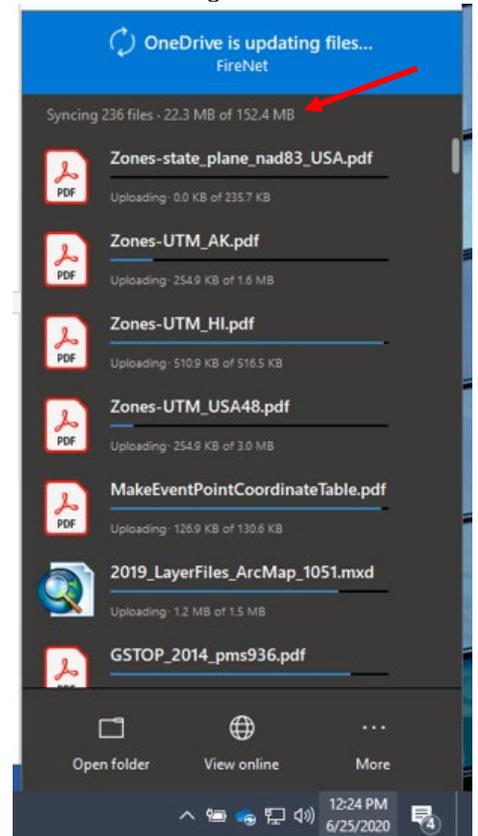
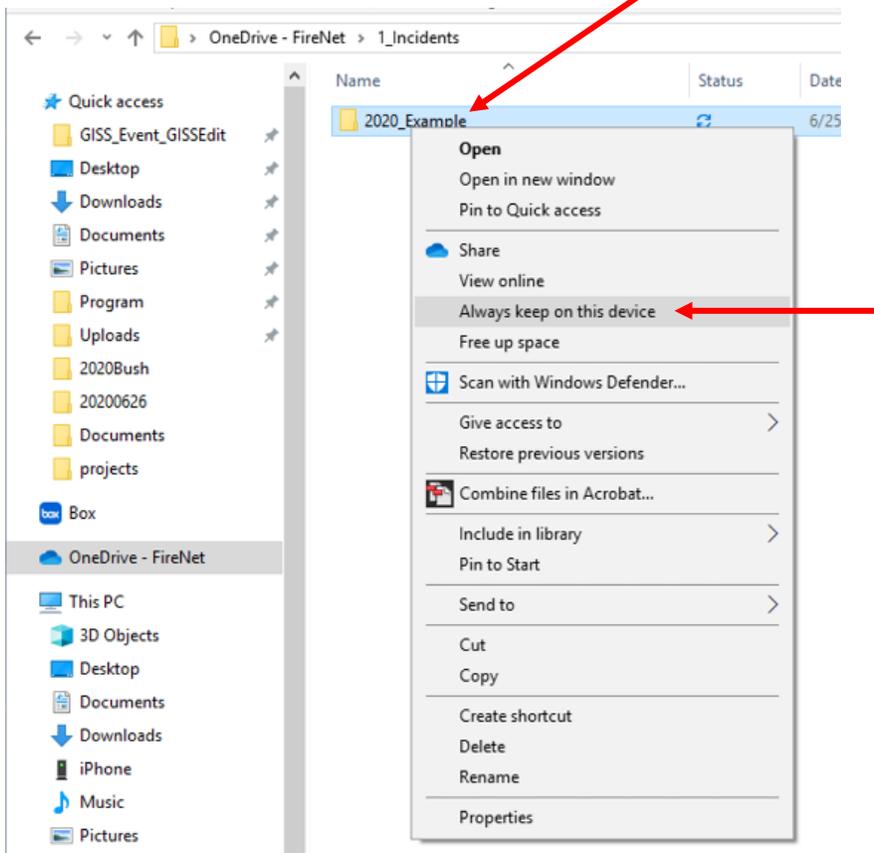
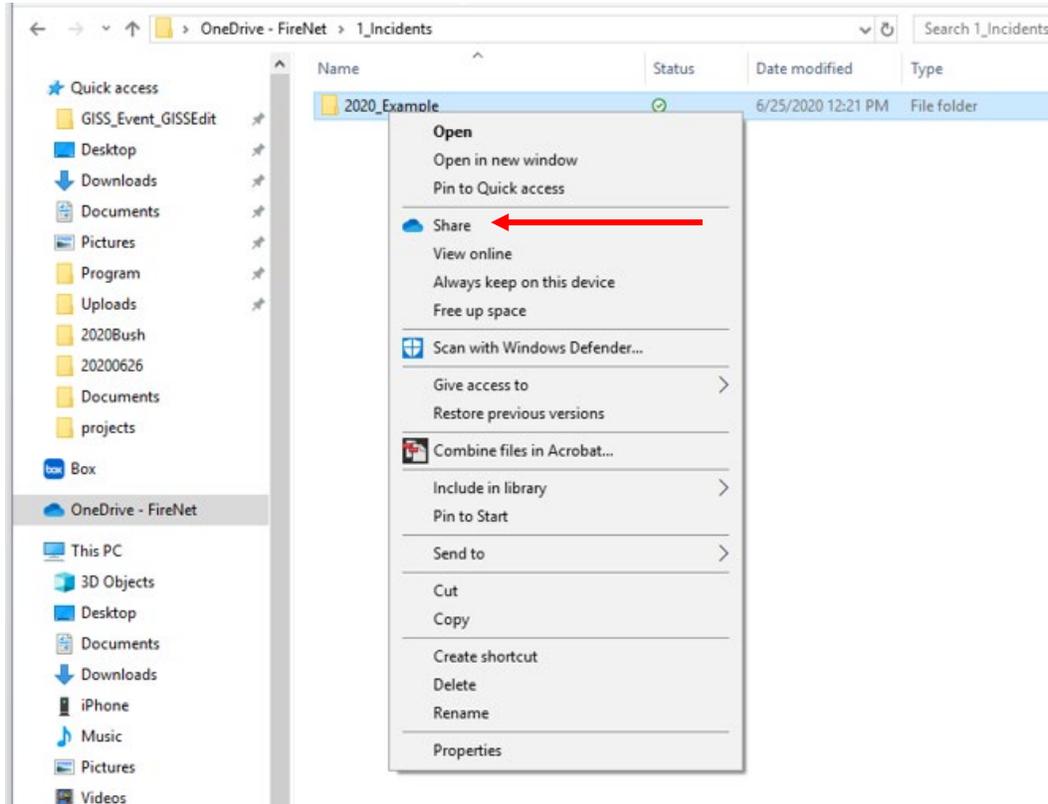


Figure 10



- 7) While your data is syncing you can share your folder to other users via OneDrive. You can either do it via File Explorer or on the web version of OneDrive at office.com. These instructions will show you how to do it via File Explorer. Right click on your incident folder and click Share. See figure 11.

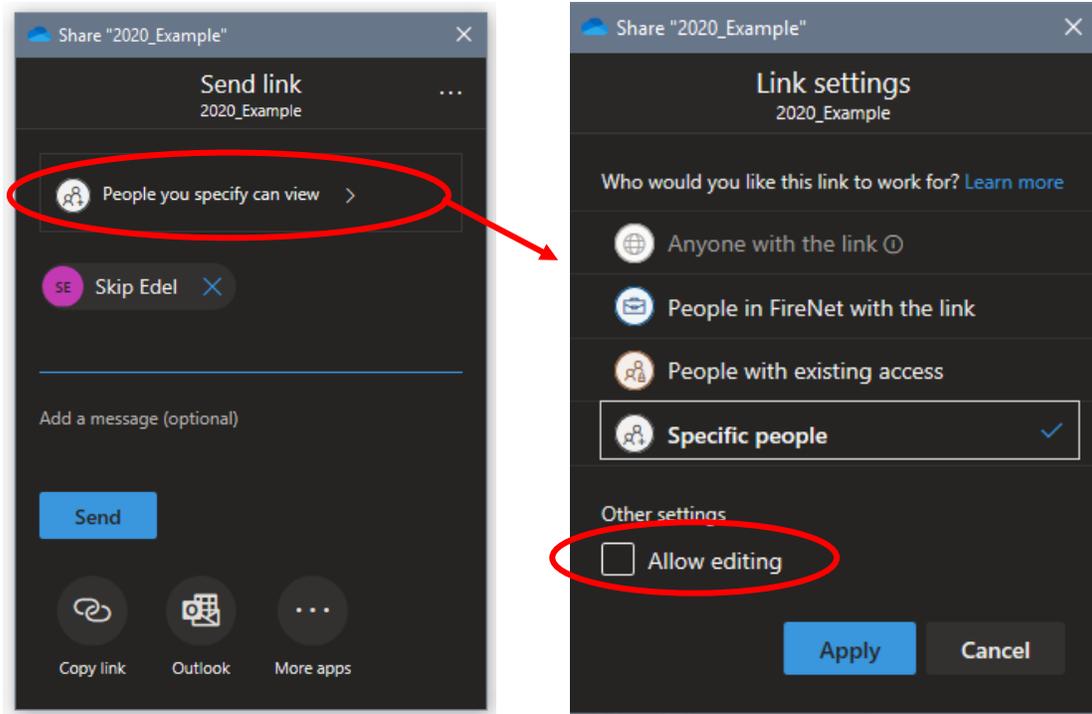
Figure 11



- 8) In the share screen enter the firenet accounts that you need to share your incident folder with. Then click on **People you specify can view** and make sure **Allow editing** is checked under Other settings. See figure 12. This will allow the users you share your incident with to edit and sync the changes back to everyone else. You can also share

subfolders of your incident, which may be a good choice to share the Products folder to a SITL.

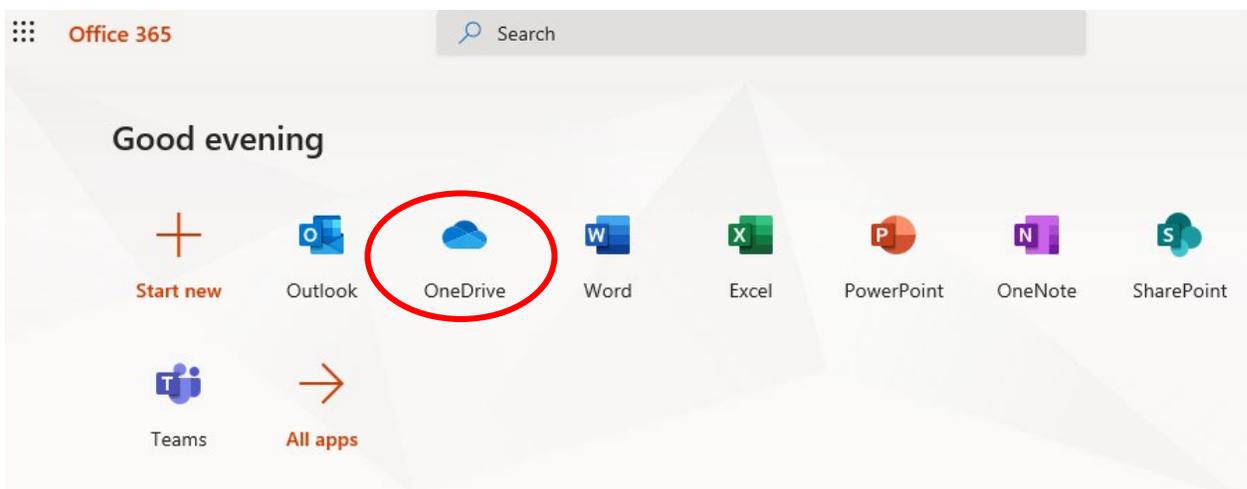
Figure 12



Syncing the incident to other computers

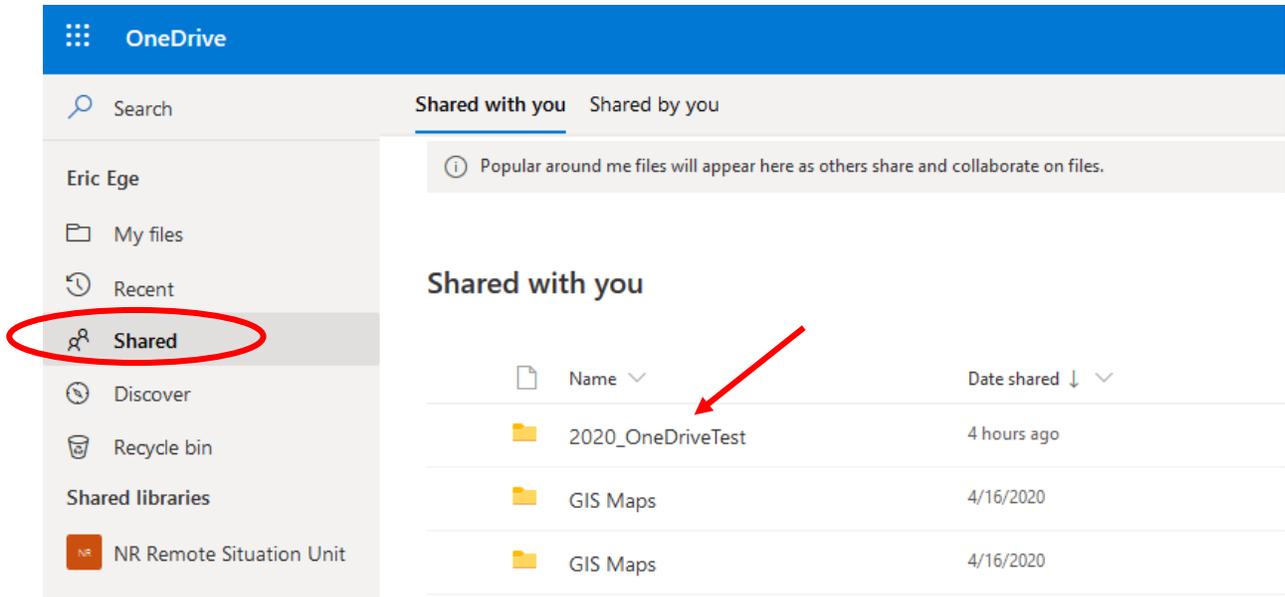
- 1) Go to <https://www.office.com> and log into your Firenet account. From there launch the web version of the OneDrive application. See Figure 13

Figure 13



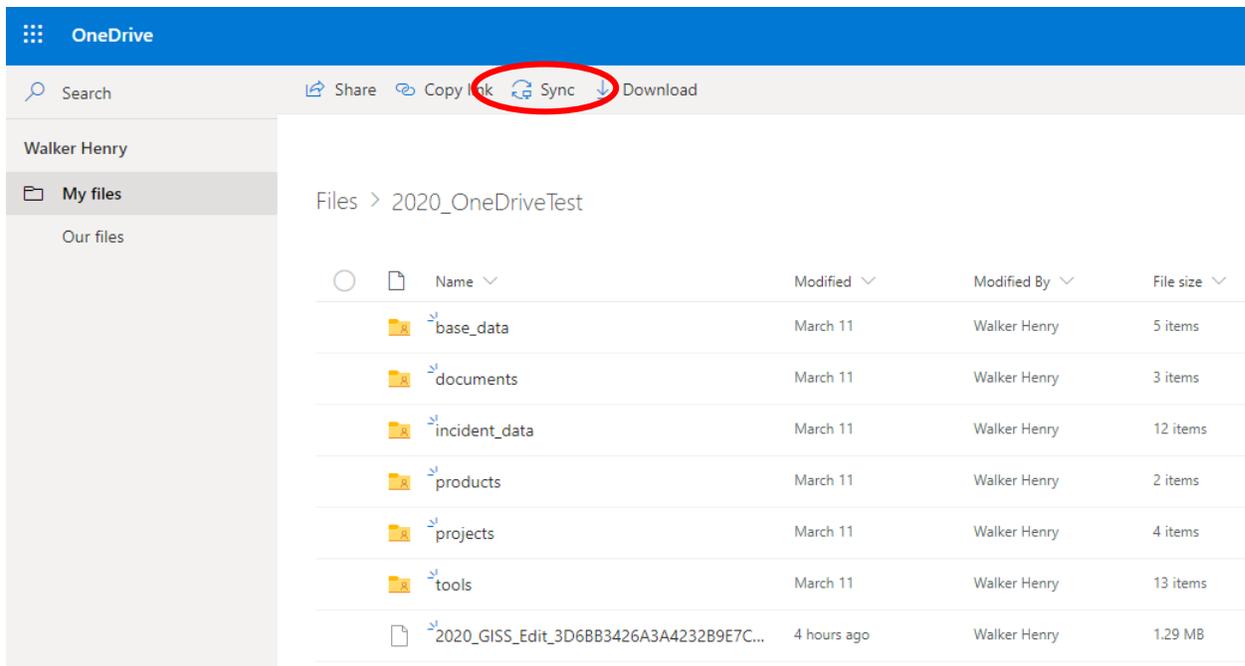
- 2) In the web OneDrive application click Shared on the left hand side of the screen. Click on the incident folder that has been shared with you to enter into the incident file structure. See Figure 14.

Figure 14



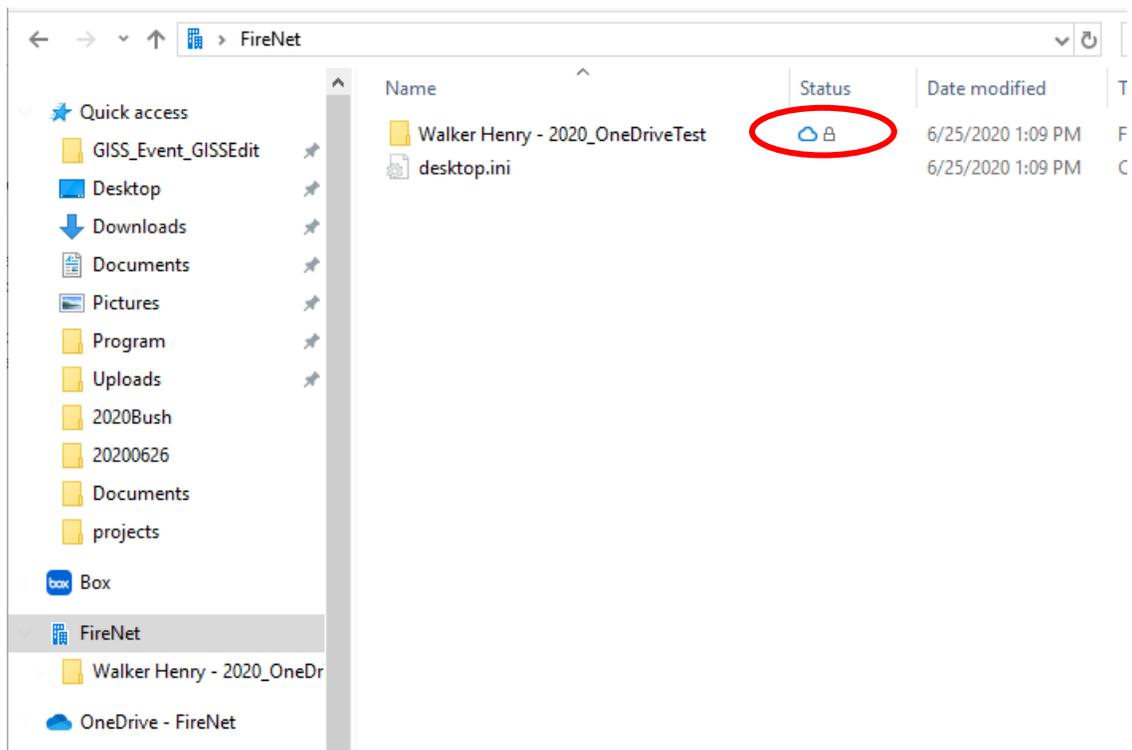
- 3) When you are inside the incident file structure click on the Sync button at the top of the screen. You do not need to select any of the folders inside the incident folder.

Figure 14



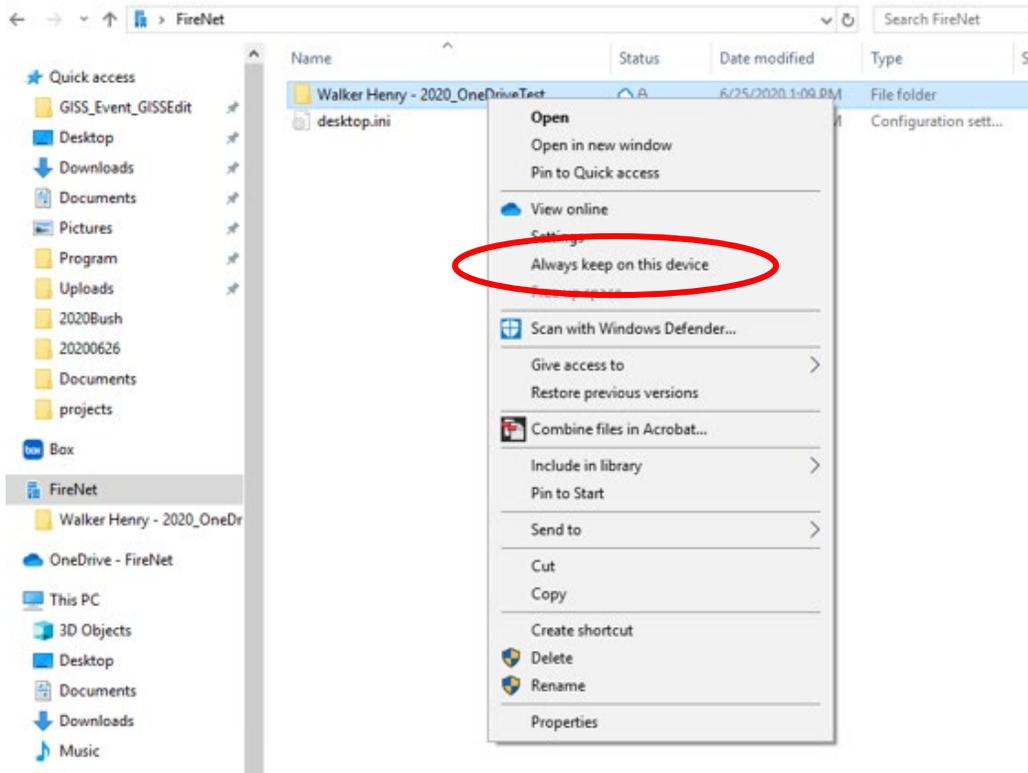
- 4) You will get a warning depending on your browser asking if you want to open the OneDrive app on your computer. You will need to allow this if you want the folder to sync.
- 5) A cloud icon will now appear in your taskbar and you can view the sync status by clicking it. This is shown in figure 9 above.
- 6) When you open Explorer you will see a FireNet folder was added to the side panel of Explorer. You can click on that and you will see the incident added to your computer. You will notice that there is still a Cloud Icon in the folder status. See Figure 15.

Figure 15



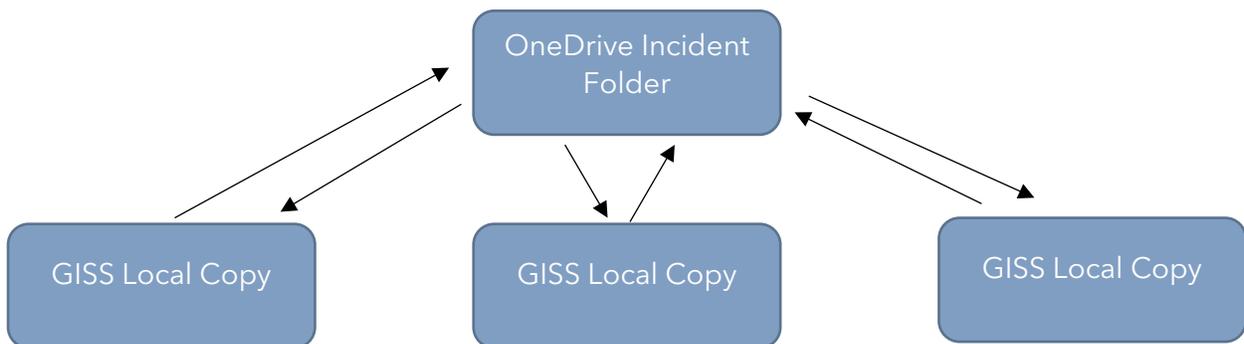
- 7) The final step is to right click on the incident folder and select Always keep on this device. This will download all of the files that are in the cloud to your local folder. You can watch the status of the sync as discussed in other sections and when the folder is fully synced on your computer you will see a green checkmark under status. See figure 16.

Figure 16



Keeping everyone in sync

Once you have everything set up following the steps above keeping everyone in sync happens in the background with minimal effort. Some things to note are that it is vital that everyone clicks the **Always keep on this device** option. This allows OneDrive to keep every local copy in sync with each other. Every GISS will have a complete local copy of the entire incident structure and OneDrive will keep them synced so everyone has all of the same files and data as shown in the concept diagram below.



OneDrive will keep all of the local folders synced with each other however while you are working in GIS it will lock all of your work for syncing. That means it won't send your work up to the cloud until you save and close out of your GIS program. You will also have to watch the sync status in the OneDrive cloud app in your system tray. You want to make sure everything fully syncs to the cloud before you get back into GIS. It also takes some communication with the other people you are working with. If there is a critical update that needs to sync to everyone you need to warn them it is coming so they can watch their sync status and make sure it comes down.

File Geodatabases are essentially file folders with many internal files. OneDrive will sync each of the internal files separately. Because the only geodatabases you are really editing in are the Incident geodatabases it is strongly suggested you follow the NIFC editing workflow. Essentially you use an edit geodatabase and then completely replace the master geodatabase with the editing one. This reduces the likelihood of internal geodatabase file corruption.

There are also reports of the geodatabase disappearing. Attached is a write-up from Marie Landis of Southwest Team 3 on how to solve that issue.

We just resolved the "disappearing geodatabase" problem. Microsoft will sometimes choose which files are visible in One Drive (we notice this after syncs) and they have to be turned on when they disappear. Right-click on the parent folder in One Drive, select "Settings," select the "Account" tab, and select "Choose folders" to toggle the folders off and on. Kind of a weird feature but I suppose useful if your One Drive is really crammed full of files.

