



How many are seeing this if the first time?

Bob Howell

- 47 years experience IT professional
- 12 years experience in Structure & Wildland Fire, EMS, Incident Management (Mayhill VFD)
- 7 years experience with NM SAR
- National Ski Patrol Alumni – outdoor emergency care and sled certified
- NM SAR Section Chief plans/ops/logs certified tracker
- NM SAR Ordering Manager
- NMSARC Board Member, Training Committee, Escape 2023 Organizing Committee



Matt Griffin

- IMT Specialist
- 2 Years Gallatin County Sheriff Search and Rescue
- 3 Years NMSAR
- FC-T D-1&5
- Communications and Computer SAR Specialist
- CalTopo SOP POC
- Instructor at ESCAPE



Agenda



- Introduction
- Subscription Information
- Installing CalTopo Desktop
- Downloading Layers



Caltopo is subscription-based service accessed initially online to establish account and download maps.

There are three types of subscriptions individual, team, first responder.

Individual Subscriptions

Free	Mobile	Pro	Desktop
\$0.00	\$20.00/year	\$50.00/year	\$100.00/year
<ul style="list-style-type: none">✓ Class-Leading Maps And Tools✗ Offline Layers✗ Private Maps✗ Premium Layers✗ Advanced Planning Tools✗ Desktop Application✗ GIS Tools <p><i>Printing: 8.5x11 up to 200dpi</i></p> <p>Your current subscription ⚙️</p>	<ul style="list-style-type: none">✓ Class-Leading Maps And Tools✓ Offline Layers ⓘ✓ Private Maps✗ Premium Layers✗ Advanced Planning Tools✗ Desktop Application✗ GIS Tools <p><i>Printing: 8.5x11 up to 200dpi</i></p>	<ul style="list-style-type: none">✓ Class-Leading Maps And Tools✓ Offline Layers ⓘ✓ Private Maps✓ Premium Layers ⓘ✓ Advanced Planning Tools ⓘ✗ Desktop Application✗ GIS Tools <p><i>Printing: 36x48 up to 400dpi</i></p>	<ul style="list-style-type: none">✓ Class-Leading Maps And Tools✓ Offline Layers ⓘ✓ Private Maps✓ Premium Layers ⓘ✓ Advanced Planning Tools ⓘ✓ Desktop Application ⓘ✓ GIS Tools ⓘ <p><i>Printing: 48x96</i></p>

The Desktop subscription is required for using CalTopo offline on PC or Mac computer

First Responder vs Team Subscription

FIRST RESPONDER

- Free subscription for first responders
- Private maps
- Improved printing
- CalTopo map layers in Google Earth
- Import Geospatial PDF map sheets
- MapBuilder Topo offline downloads in the app

50% off Pro or Desktop subscriptions

TEAM

- NMSARC pays \$1000/yr for 100 users supported by your donations
- Mission Map Central Storage
- Archive for all prior missions
- Reference Data shared statewide
- Mutual Aid Incidents only for large SAR Missions
- Live Team Tracking via mobile app, In Reach, APR... e
- SMS Locator (SARLOC)
- Sub-Teams
- Flexible Permissions with the ability to share reference and archive data

If you sign up for a First Responder subscription you qualify for 50% off the Desktop subscription or \$50/year.

As a member of a Team account your automatically receive the Desktop version uplift.



Installing CalTopo Desktop

Desktop Installation - 1

The screenshot shows the CalTopo web interface. At the top, there is a search bar with the placeholder text "Enter coordinates or a location name". To the right of the search bar are "Settings", "Close", and "Your Data" buttons. The "Your Data" button is highlighted with an orange arrow. Below the search bar is a "Your Data" dropdown menu with several tabs: "Your Maps", "Bookmarks", "Your PDFs", "Your Tracks", "Your Layers", "Map Sheets", "Your Icons", and "Desktop Access". The "Desktop Access" tab is selected and highlighted with an orange arrow. Below the tabs, there is a section titled "Offline Access" with a sub-section "Get Started" containing three bullet points: "Download CalTopo desktop installer" (highlighted with an orange arrow), "Offline data is downloaded directly within CalTopo Desktop.", and "For detailed instructions, see the user guide". Below this is a "Recommended System Requirements" section with a list of requirements. A dark grey box with white text is overlaid on the right side of the screenshot, containing a three-step list: "1. Login to online CalTopo", "2. Click Your Data", and "3. Click Download CalTopo desktop".

Enter coordinates or a location name

Settings Close Your Data

Your Data

Your Maps Bookmarks Your PDFs Your Tracks Your Layers Map Sheets Your Icons Desktop Access

Offline Access

CalTopo Desktop gives you most of CalTopo's functionality, offline and away from the internet on a PC or Mac. Some layers and functionality are internet based and unavailable (such as Google layers).

Get Started

- [Download CalTopo desktop installer](#)
- Offline data is downloaded directly within CalTopo Desktop.
- For detailed instructions, see the [user guide](#)

Recommended System Requirements

- Processor: 64-bit Intel i5 or i7, Apple M1 (32-bit processors are not supported)
- RAM: 4GB minimum, 8+GB recommended
- Hard Disk: Recommended size varies by usage, however SSD highly recommended
- App install: approximately 200MB
- User data: Depends on usage, typically 50-200MB
- Offline tiles: Varies based upon coverage and layers
 - For example using the state of Colorado:
 - MapBuilder Topo (max resolution): approximately 75GB
 - Global Imagery: approximately 140GB
 - MapBuilder Topo + Global Imagery: approximately 170GB (some data is shared between layers)

Desktop Installation - 2

CalTopo - Download Offline App

Latest Stable Version (4237)

Important Notice: Beginning with version 4161, CalTopo Desktop uses a new installer that includes a bundled Java runtime. User data (topo.properties, downloaded tiles, local maps, etc) are now stored in a CalTopo folder in your home directory. If you are upgrading from a previous version of CalTopo Desktop you will need to move your existing files to this new location.

Important Notice: Beginning with version 4154, CalTopo Desktop uses a new database engine, and will not read map data saved on versions 4153 and below. Before upgrading, you backup your maps by either exporting them as GeoJSON files, or syncing CalTopo Desktop to CalTopo.com, and then uploading your maps to CalTopo.com.

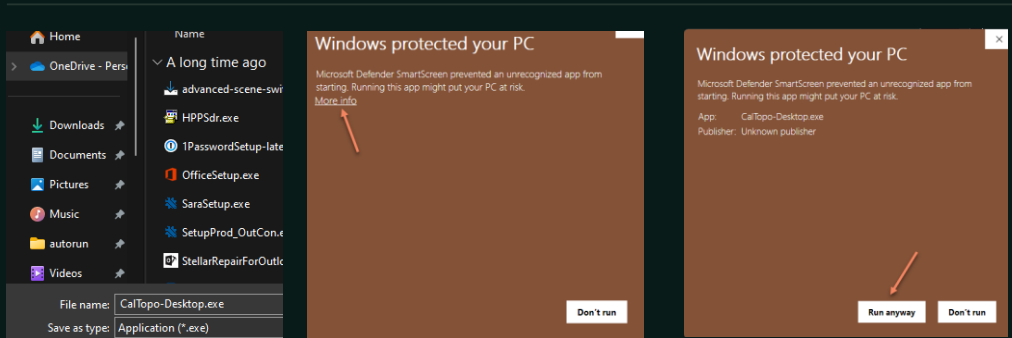
Windows installer	94 MB	March 15, 2023
MacOS installer	90 MB	March 15, 2023
jar only	45 MB	March 15, 2023

Click either Windows or MacOS installer

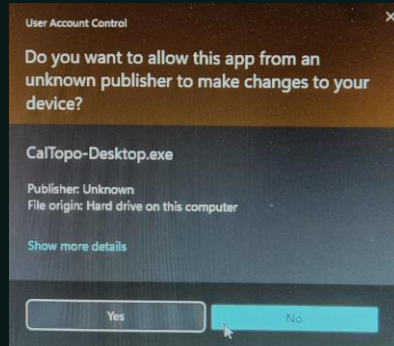
Previous Stable JARs (just in case)

4236	45 MB	March 8, 2023
4234	45 MB	February 23, 2023
4233	45 MB	February 16, 2023
4232	45 MB	November 30, 2022

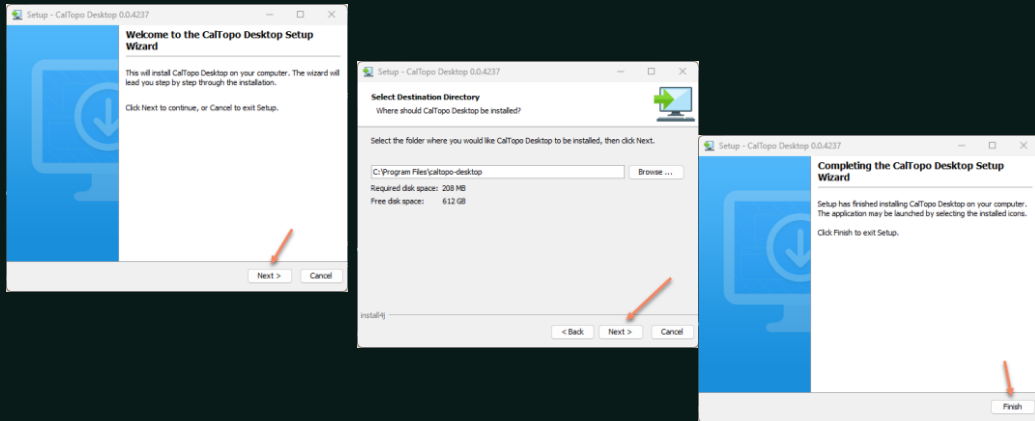
Desktop Installation - 3



Desktop Installation - 4



Desktop Installation - 5



Start CalTopo Desktop

The screenshot shows a Windows Start menu search for 'caltopo-desktop'. The search results show 'caltopo-desktop App' and 'CalTopo-Desktop.exe'. An arrow points to the 'Open' button next to the app. To the right, a command prompt window shows the following text:

```
Welcome to CalTopo Desktop version 0237, 03/10/23 16:18:09  
Temp data unpacked to C:\Users\bob\AppData\Local\Temp\winstone\EmbeddedData  
  
Please open your web browser to http://localhost:8080/  
2023-00-10 12:58:20 DesktopApplication [INFO] Properties file at C:\Users\bob\CalTopo\topo_properties contains no settings. Using default configuration.
```

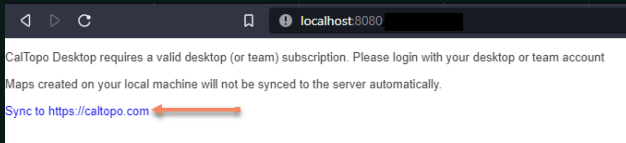
A Windows Security Alert dialog box is overlaid on the command prompt, stating: "Windows Defender Firewall has blocked some features of this app." The details show the app name as 'caltopo-desktop.exe', publisher as 'Unknown', and path as 'C:\Program Files\caltopo-desktop\caltopo-desktop.exe'. The alert asks to allow the app to communicate on public and private networks. The 'Allow all connections' checkbox is checked. A red arrow points to the 'Allow all connections' button.

Allow Windows Firewall Access

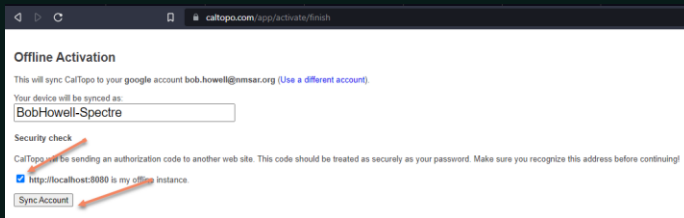
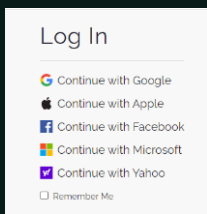
REMEMBER: Always leave the caltopo-desktop Command line window open, it's ok to minimize.

Run CalTopo Desktop

Open browser: localhost:8080



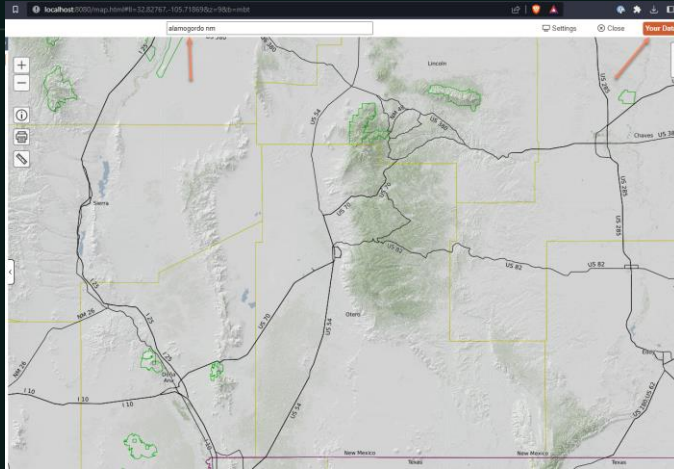
1. Open browser window to localhost:8080
2. Click Sync to <https://caltopo.com>
3. Login with team or desktop account
4. Click security check box
5. Click Sync Account button





Downloading Layers

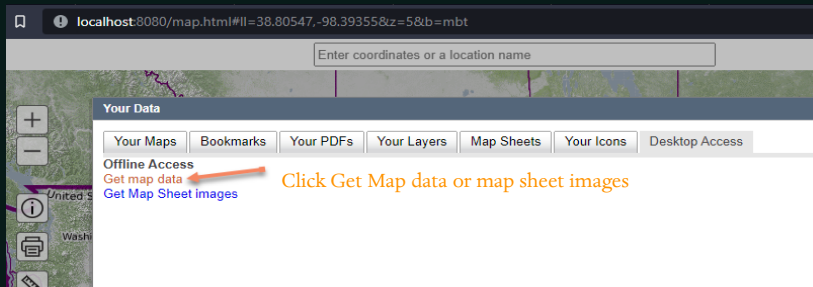
Position Map to Area for Downloads



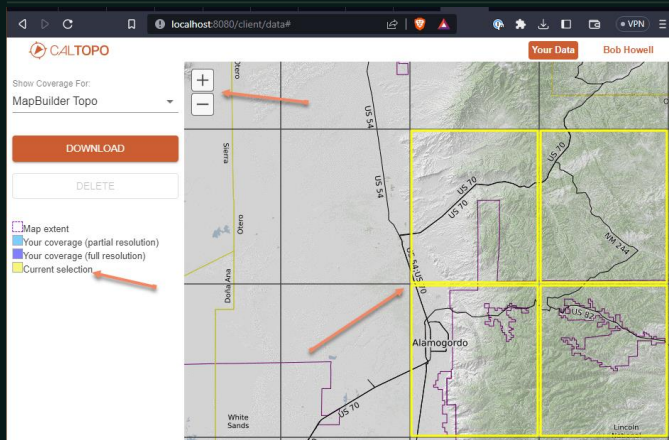
1. Position map near area you wish to download
2. Click Your Data

Get Map Data

Open browser: localhost:8080



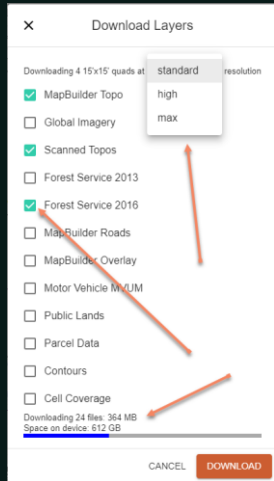
Select Tiles to Download



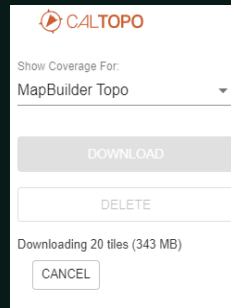
1. Select each tile for the area to be downloaded. Use shift-click or ctrl-click. Selected tiles all show yellow border shading.
2. Click Download

Tiles can also be removed by selecting and clicking DELETE. The DELETE option will remove ALL map layers from the selected area.

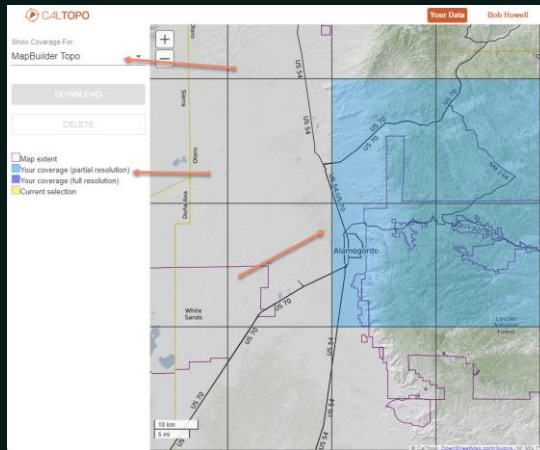
Select Map Layers and Resolution



1. Select resolution for maps layers
2. Select maps to download
3. Check available disk space
4. Click **DOWNLOAD**

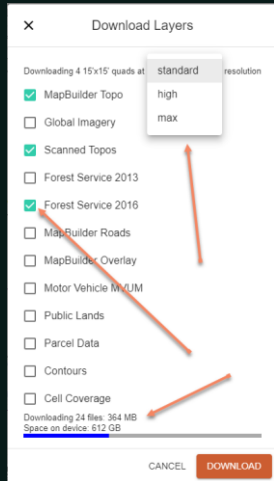


Check Map Layers

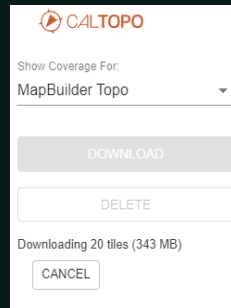


1. Use dropdown to inspect tiles for each layer
2. If needed, select additional tiles and repeat
3. Note colors show resolution of tiles
4. No colors = no offline map layer
5. Be sure to test with your internet disconnected or turn on airplane mode BEFORE going to a mission.

Select Map Layers and Resolution



1. Select resolution for maps layers
2. Select maps to download
3. Check available disk space
4. Click **DOWNLOAD**





Change location of Map Tiles

1. Edit your topo.properties file.
2. Add the code `sarsoft.map.localTileStore=/some/other/path/tiles` where you replace everything after the = sign with the path on your computer to find the tiles.

Macbook: `sarsoft.map.localTileStore=/some/other/path/tiles`

Windows requires that you escape

the `\`: `sarsoft.map.localTileStore=\\some\\other\\path\\tiles` or

use `sarsoft.map.localTileStore=/some/other/path/tiles`

Because map data files can be quite large, some users prefer to store the files on an external hard drive. To do this, you will need to edit your topo.properties file. Add the code `sarsoft.map.localTileStore=/some/other/path/tiles` where you replace everything after the = sign with the path on your computer to find the tiles.

Macbook: `sarsoft.map.localTileStore=/some/other/path/tiles`

Windows requires that you escape the

`\`: `sarsoft.map.localTileStore=\\some\\other\\path\\tiles` or

use `sarsoft.map.localTileStore=/some/other/path/tiles`

Thank you

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<https://nmsarc.org>



APRIL 2023

ESCAPE 2023 CALTOPO TRAINING

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ESCAPE 2023

