



## Access Gmail, or other IMAP based Email over Restricted Bandwidth Connections

As the bandwidth of most electronic communications channels continues to increase, content providers take advantage of the increased bandwidth by delivering more and more content and at higher resolutions. But not all communication channels can support a high effective bandwidth. These Restricted Bandwidth communication channels may be considered bandwidth restricted if its bandwidth is less than the bandwidth that a content provider can support. Or even a high-bandwidth communication channel may be effectively bandwidth restricted if the cost of sending content via the high-bandwidth communication channel is so high as to be an effective restriction on the bandwidth that can be used. Another example occurs when many devices use the same high-bandwidth communication channel and the communication channel may be effectively bandwidth restricted for each device. If a high-bandwidth communication channel is used by a device that is nearly out of the communication channel's range or that is used in an environment (e.g., noisy) where reception is otherwise poor, the communication channel may be effectively bandwidth restricted. And we all see how cell phones become bandwidth restricted because a smartphone is being used in a geographic location where reception is poor.

A particularly noteworthy example of a restricted-bandwidth communication channel may be a satellite telephone, i.e. satellite exphone. A satellite phone may be restricted to sending content at low rates relative to the rates at which a content provider can send content. Even if a satellite phone communication channel did support a higher bandwidth, the cost of sending content might be so high as to be an effective restriction on the bandwidth that can be used.

For all these reasons, it can be difficult for devices to access the content of content providers who have designed their interfaces to take advantage of high-bandwidth communication channels. For example, it may take a prohibitively long time or be prohibitively expensive to download even a single email message whose content is only one word because the HTML document defining the message page may include thousands of characters to fully specify its format and content. It would take an even longer time or be more costly to download all the content of an inbox or to download even a short HDTV video of a web page.

Enter OneMail for Gmail and many other IMAP based email services. Nothing has become more routine in our day to day lives than checking for email. But over restricted bandwidth connections this can be extremely slow, extremely expensive or simply not possible. For Gmail and many other IMAP email services this can be particularly frustrating because they are highly popular email services used by billions of people use each day. Many of these people would like to continue to do so when they are faced with restricted bandwidth connections. OneMail is the first application that allows them to do so.

OneMail works in a private and secure fashion to efficiently acquire your Gmail, or other IMAP email accounts over restricted bandwidth connections. It first reaches out and snaps back to you the basic information about each email waiting for you in your Gmail inbox, telling you who it is from, how big it is, and what is its date and subject. OneMail users can then tag only those

mails of interest to them for high-compression retrieval on their next connection over the restricted channel. Untagged email remains on the Gmail, or other server for access at a later time when the mail user has a higher bandwidth connection.

As a result, OneMail provides rapid, efficient access to the Gmail and others that really matters to you over even the most restricted bandwidth communication channel.

## **OneMail**

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User guide

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## 2. Things to Remember / FAQ

You can setup one of each account types: Gmail, or other IMAP based email accounts. If you want to check two Gmail accounts you could register the first using the Gmail option and then the second Gmail using the IMAP option.

Once you setup OneMail and authenticate your account on your device - **do not remove the app or your account** unless you have full internet access to re-authenticate your account. **You will not be able to re-authenticate your account via your satellite phone connection. *Be sure to test the connection to your email account while on regular internet connections before leaving, especially if you have not used the service for awhile, as some authentication keys can auto expire requiring you to re-authenticate after a period of time.***

Sizes observed in your header list are un-compressed sizes. In general, the download size can be much smaller.

## FAQ

### What is OneMail?

OneMail is a unique email service allowing you to efficiently check multiple email addresses through almost any channel, including satellite telephones, on your mobile iOS and Android devices.

### Is there a desktop version of OneMail?

There is not. However, OneMail will run on newer Mac computers with the M1 or newer ARM processor.

### Is OneMail FREE?

While the OneMail app is free, you must have an active OneMail account. You can visit [www.ocens.com/OneMail](http://www.ocens.com/OneMail) to activate an account.

### What email address do I use with OneMail?

OneMail will allow you to check almost any email account, including Gmail, Hotmail, Yahoo, AOL, and a wide variety of IMAP mail services.

### I have two Gmail accounts - how can I check both?

To setup OneMail to access two Gmail accounts you will configure the first account using the GMAIL setting. The second you will configure using the IMAP setting. Details on setting this up can be found here: [Running Gmail under the IMAP section](#)

### Why do I get an Authentication Failed message when adding my Yahoo Mail account to OneMail?

You may need to set up an app specific password for your account or enable less secure apps. More information can be found here: [Setting up Yahoo Email Accounts](#)

### My messages appear to be empty.

Be sure you are downloading the full message and not just the header information. When you first connect OneMail will download just the header information for your messages. This allows you to see what is waiting and then select just the email messages that you actually want. Tapping on the message flags it for download on your next connect. Once you connect again the full message will be downloaded and tapping on it again will now open the message.

### What kind of connections can I use?

The technology behind OneMail is designed for use with low bandwidth satellite phones that operate on networks such as Iridium, Inmarsat, Globalstar, Thuraya and others. It does work equally well over standard cellular or Wi-Fi connections.

### What satellite devices are compatible with OneMail?

In addition to standard network/Wi-Fi connections - OneMail will work with most devices that are running on the following satellite networks:•Iridium, Inmarsat, Globalstar, Thuraya, KVH, and others.

### How do I setup OneMail to connect via my satellite connection?

With your smartphone connected to your satellite device's Wi-Fi connection - you will then look in the OneMail app Settings -> Connection Settings and then select the appropriate connection.

### I get an error message when connecting via Sidekick

When you first connect via a Sidekick connection you may see the following message: *"ERROR: unable to connect, please try again."* This can happen on your first attempt to connect. At this time just attempt your connection again. If this error continues to pop up without ever making a successful connection, you will want to make sure your device is connected to the Sidekick Wi-Fi and that your satellite device has good signal strength.

### 3. First Use

The first time you launch the OneMail app you will be greeted with a Welcome page similar to the following:



Here you can choose to go through the Tutorial or skip and go directly to the email setup screen.

You may also disable the Tutorial from launching each time you start OneMail by tapping on check mark at the bottom of the screen.


You are now ready to begin using OneMail.

### **3.1. What if I don't have an Internet connection?**

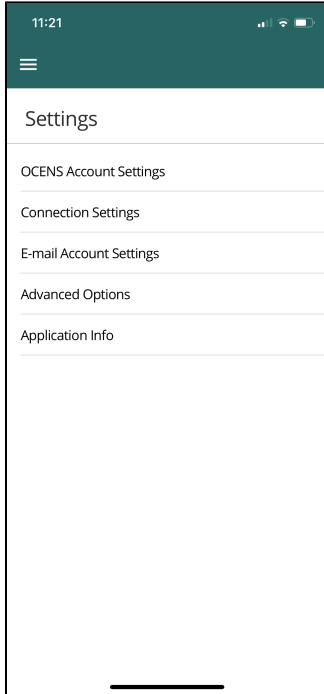
You will need to have an active internet connection to setup your email accounts. This is required for verification and security and cannot be performed over low bandwidth connections such as Iridium GO.

## 4. Setting up your Account

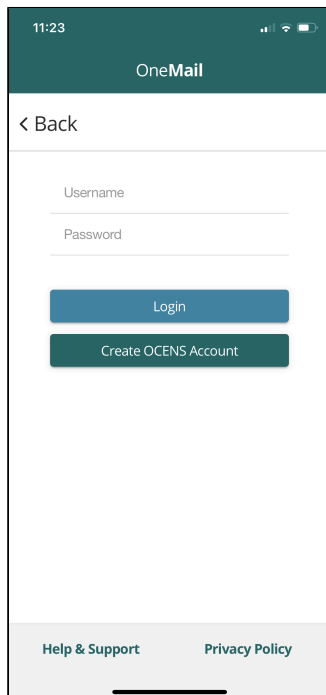


From any screen in OneMail you can select the Menu by tapping on the  icon to open the settings.

On the Settings screen select the Account Settings:



Enter your account Username and Password If you have not already created an account tapping the "Create Account" button will take you to the registration page on our website.






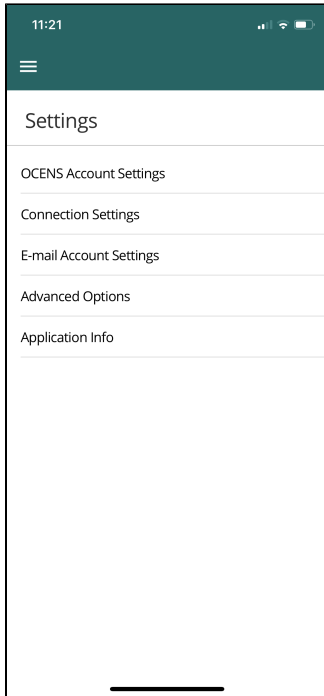
Select Login to confirm your account and return to the Settings screen.

## 5. Setting up Gmail Email Accounts



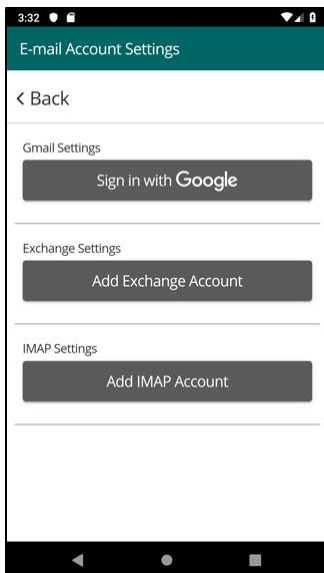
From any screen in OneMail you can select the Menu by tapping on the  icon to open the settings.

On the Settings screen select Email Settings:



Select the Sign in with Google option.

(Note: This step requires standard internet connection and cannot be done via satellite phone connection.)



From here you will follow the Google prompts to allow access to your Gmail account. Once this is complete you will be returned to the OneMail Inbox screen.

As Google continues to lock services down more tightly you may now see the following:

9:01



## Google hasn't verified this app

The app is requesting access to sensitive info in your Google Account. Until the developer ([ocensappaccount@gmail.com](mailto:ocensappaccount@gmail.com)) verifies this app with Google, you shouldn't use it.

If you're the developer, submit a verification request to remove this screen. [Learn more](#)

[Advanced](#)

BACK TO SAFETY

https://accounts.google.com/signin/oauth/danger...

Done

If you tap the [Advanced](#) link on the lower right you will see this:

9:01



## Google hasn't verified this app

The app is requesting access to sensitive info in your Google Account. Until the developer ([ocensappaccount@gmail.com](mailto:ocensappaccount@gmail.com)) verifies this app with Google, you shouldn't use it.

If you're the developer, submit a verification request to remove this screen. [Learn more](#)

[Hide Advanced](#)

BACK TO SAFETY

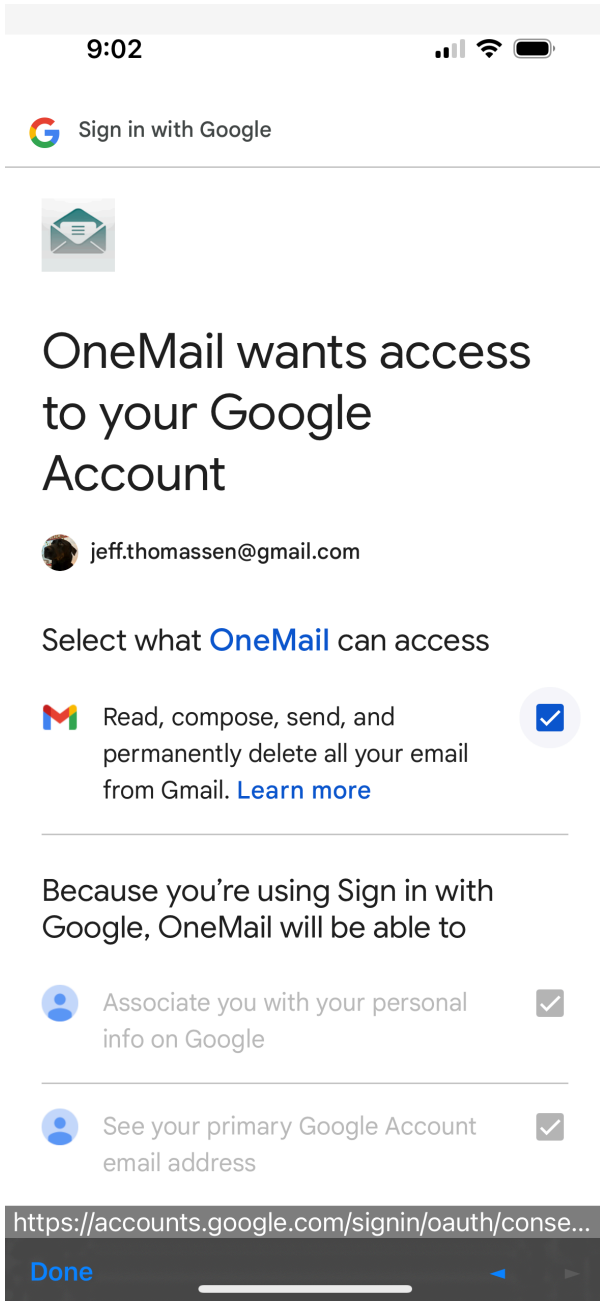
Continue only if you understand the risks and trust the developer ([ocensappaccount@gmail.com](mailto:ocensappaccount@gmail.com)).

[Go to OneMail \(unsafe\)](#)

https://accounts.google.com/signin/oauth/danger...

Done

From here you need to tap the "[Go to OneMail...](#)" link to get to the next page where you will need to select the box to allow OneMail access to "[Read, compose, send...](#)"



If you are not seeing these new options you may need to follow the [Setting Up Gmail under the IMAP section](#) to link your account.

## 6. Setting up Gmail under the IMAP section

Accessing your Gmail account now requires you to configure your Gmail account for IMAP access.

The best method is to create an app specific password


**Use when users account has 2-step authentication ON** - Setting your account up via this method will avoid the need to authenticate via a standard internet connection should you not have access.

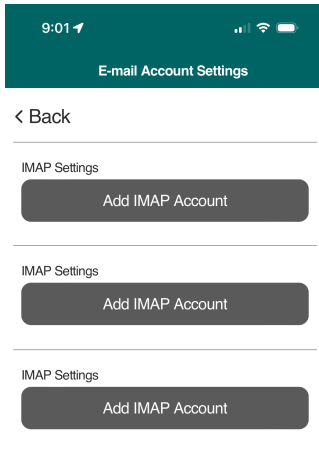
1. Login to your Gmail account online: <https://mail.google.com>
2. In the top right corner of the page is a “gear icon”. Click on it.
3. Select Settings
4. Look for the “Forwarding and POP/IMAP” tab at the top of the screen. Click on it.
5. Scroll down and 'Enable IMAP' and then 'Save Changes'.
  
6. Return to the main page of your Gmail account and this time click on the icon in the upper right with your account initial(s) in it, then Select the Google Account button
7. Select the Security link on the left
8. Look for the section “Signing into Google” and select App passwords
9. You will be asked to enter your Google password and the possibly authenticate into your account.
10. You should now see your app specific passwords. You will need to create a new password that you will use with your OneMail app to access your Gmail.
  - Click on “Select app”
  - Select “Other (Custom name)”
  - Give it the Name “OneMail”
  - Click on “Generate”
  - Copy down this password so that you can enter it when you setup OneMail
  -

You are now ready to setup OneMail

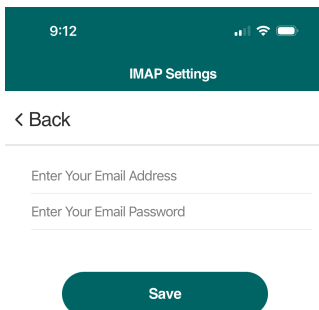
### In OneMail



1. Tap the  icon in the upper left
2. Select "E-mail Settings"
3. Select “Add IMAP Account”



4. Enter your Gmail username (typically your full Gmail address) and for the password use the one you just generated.



You are now ready to use OneMail to check your Gmail account.  
Just return the OneMail inbox and tap the Connect button.

**The other method is to allow less secure apps to access your Gmail Account**

***Use when user does not have 2-step authentication ON.***


1. Login to your Gmail account online: <https://mail.google.com>
2. In the top right corner of the page is a “gear icon”. Click on it.

3. Select Settings
4. Look for the “Forwarding and POP/IMAP” tab at the top of the screen. Click on it.
5. Scroll down and 'Enable IMAP' and then 'Save Changes'.
  
6. Return to the main page of your Gmail account and this time click on the icon in the upper right with your account initials in it, then Select the Google Account button
7. Select the Security link on the left
8. Scroll down until you get to the “Less secure app” section
9. Make sure 'allow less secure app access' is ON.

You are now ready to setup OneMail

### In OneMail



1. Tap the  icon in the upper left
2. Select "E-mail Settings"
3. Select “Add IMAP Account”
4. Enter your Gmail username (typically your full Gmail address) and then enter your Gmail password.

You are now ready to use OneMail to check your Gmail account.

Just return to the OneMail inbox and tap the Connect button.

### In OneMail app

1. Skip Setup on the blue screen or go to the Settings and select Email Settings
2. Choose Add IMAP Account
3. Use your Gmail email address and password.

You are now ready to check your Gmail account.



## 7. Setting Up Yahoo Email Account

Yahoo has a custom authentication process that prevents many 3rd party apps from checking your mail account. There are a couple methods for allowing access to the OneMail app.

### **Preferred method:** Set app specific Password


If you've activated two-step verification or Account Key for your Yahoo account, you'll need to generate and use an "app password" to access Yahoo Mail from OneMail.

1. Sign into your Yahoo account "mail.yahoo.com"
2. Click on the icon in the upper right with your account initial(s) in it, then Select the Account Info link
3. Select Account Security form the left menu - you may be required to login to your account again.
4. Scroll down to the section "Generate app password"
5. Select your app= Other and then name it OneMail
6. Click Generate
7. Record this password for use in the OneMail app
8. Click Done.

You are now ready to setup OneMail

### **In OneMail**



1. Tap the  icon in the upper left
2. Select "E-mail Settings"
3. Select "Add IMAP Account"
4. Enter your Yahoo username (typically your full Yahoo address) and for the password use the one you just generated.

You are now ready to use OneMail to check your Yahoo account.

Just return the OneMail inbox and tap the Connect button.

### **Optional method:** Allow less secure apps


This method is secure as long as you have a strong password. If you have Two-step verification on you will need to turn that off to access this method.

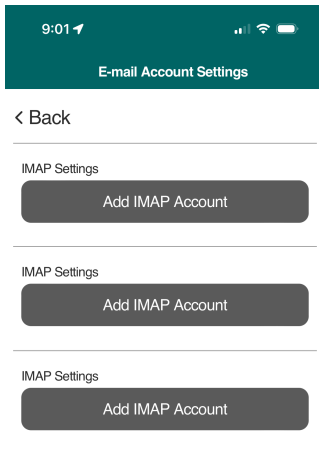
1. Sign into your Yahoo account "mail.yahoo.com"
2. Click on the icon in the upper right with your account initial(s) in it, then Select the Account Info link
3. Select Account Security form the left menu - you may be required to login to your account again.
4. Scroll down to "Allow apps that use less secure sign in" and turn this on.
  - i. If you do not see this option, then you may need to turn off Two-step verification. Once you turn this off you can refresh your page and then option "Allow apps that use less secure sign in" will appear below this.

You are now ready to setup OneMail

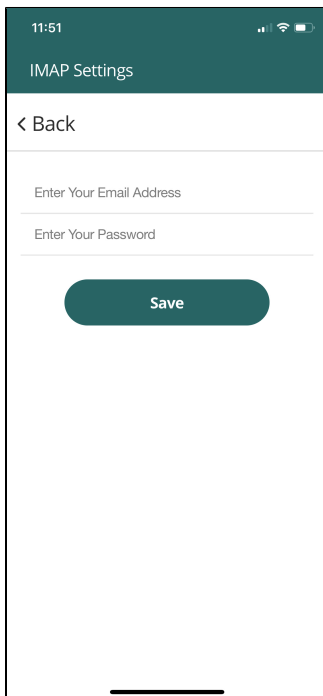
### **In OneMail**



1. Tap the  icon in the upper left
2. Select "E-mail Settings"
3. Select "Add IMAP Account"



4. Enter your Yahoo username (typically your full Yahoo address) and for the password use the one you just generated.



You are now ready to use OneMail to check your Yahoo account.  
Just return the OneMail inbox and tap the Connect button.

## 8. Setting Up Apple Email Account

This is relevant if you have 2 factor authentication enabled on your Apple account.

<https://support.apple.com/en-us/HT204397>

### Using app-specific passwords

App-specific passwords allow you to sign into your account securely when you use third-party apps with your Apple ID.

App-specific passwords are passwords for your Apple ID that let you sign into your account and securely access the information you store in iCloud from a third-party app. For example, use app-specific passwords with mail, contacts, and calendar services not provided by Apple. App-specific passwords maintain a high level of security and help ensure your Apple ID password won't be collected or stored by any third-party apps you use.

To generate and use app-specific passwords, your Apple ID must be protected with two-factor authentication.

### How to generate an app-specific password


- Sign into your Apple ID account page.
- In the Security section, click Generate Password below App-Specific Passwords.
- Follow the steps on your screen.

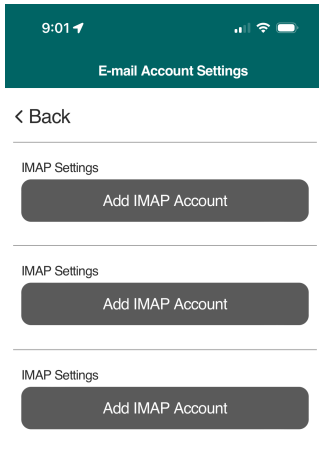
After you generate your app-specific password, enter or paste it into the password field of the app as you would normally.

You are now ready to setup OneMail

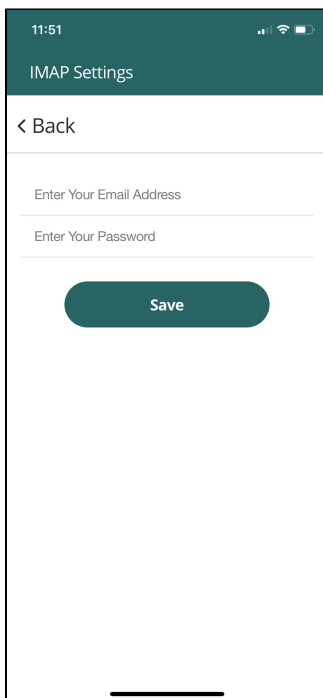
### In OneMail



1. Tap the  icon in the upper left
2. Select "E-mail Settings"
3. Select "Add IMAP Account"




4. Enter your email address and for the password use the one you just generated.



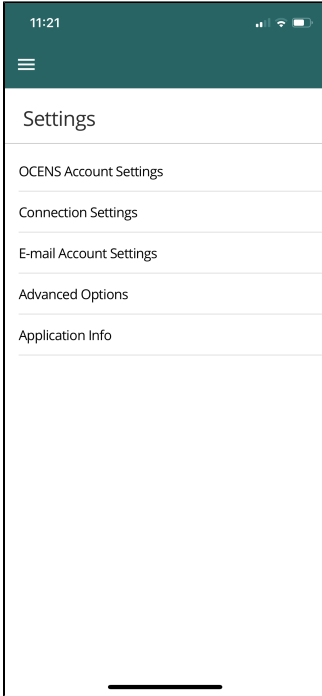
You are now ready to use OneMail to check your account.  
Just return the OneMail inbox and tap the Connect button.

## 9. Setting up other IMAP Email Accounts

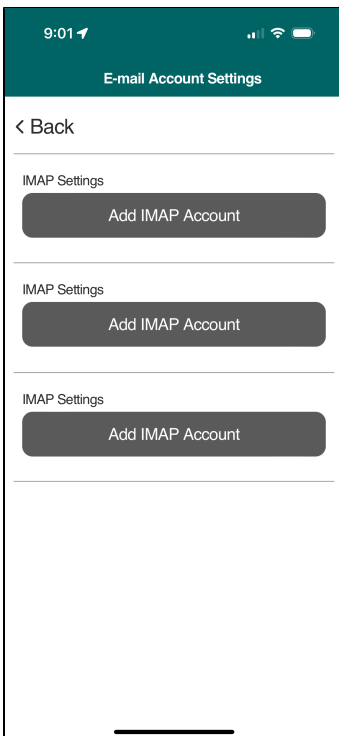


From any screen in OneMail you can select the Menu by tapping on the  icon to open the settings.

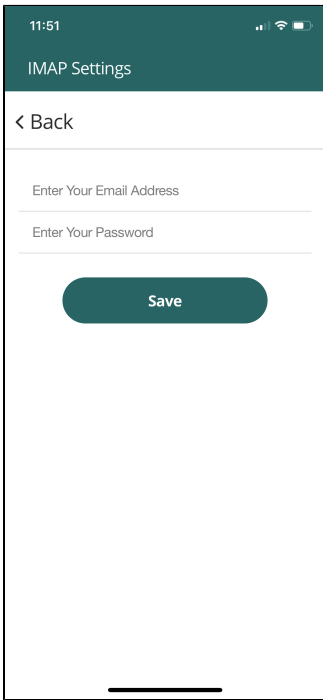
On the Settings screen select Email Settings:



Select "Add IMAP Account".




Enter your Email account Username (this is also your full email address) and Password:



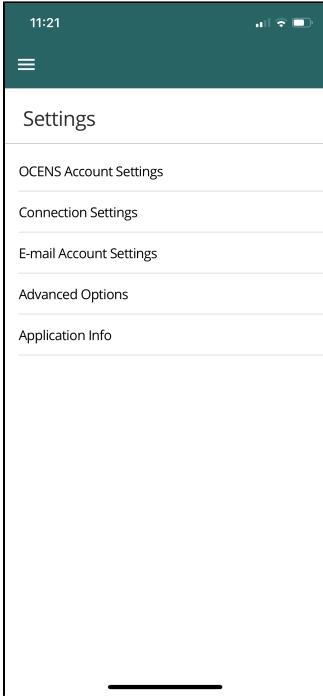
Once this is complete you will be returned to the OneMail Inbox screen.

## 10. Connection Settings

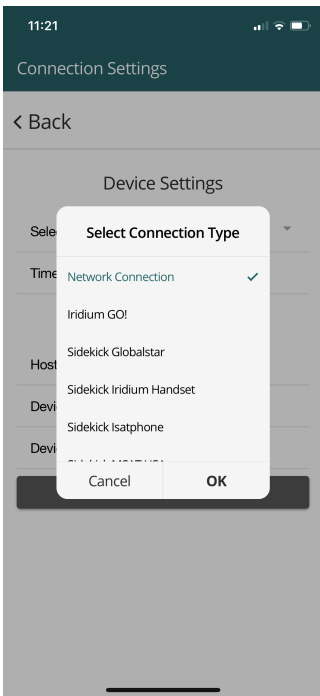


From any screen in OneMail you can select the Menu by tapping on the  icon to open the settings.

On the Settings screen select the Connection Settings:



Here you will be able to change the connection Method.



## 11. Advanced Options

The Advanced Options section is where you can change the Application Language as well as Font Size.


Update Common Database:

Reset Database: It is vitally important that you not reset the database unless you have been instructed to do so.

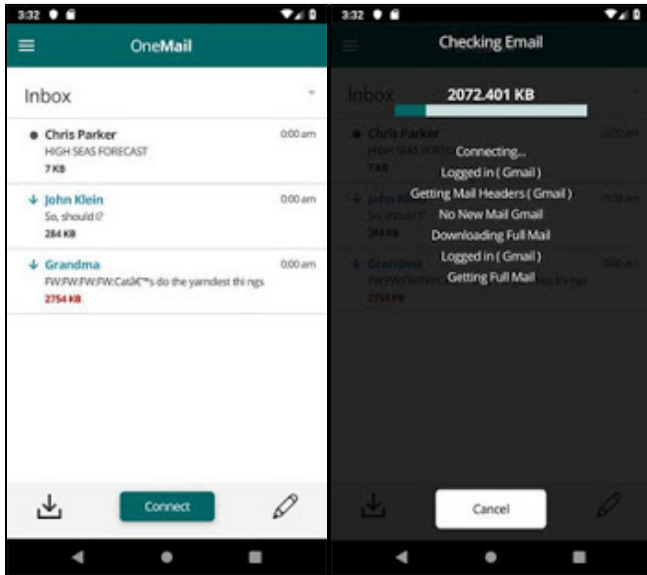


## 12. Downloading Email



From any screen in OneMail you can select the Menu by tapping on the  icon to open Settings screen and then select the Inbox.

From the Inbox you can tap the Connect button to begin downloading your email headers.



Once you have downloaded your email headers you can select the emails for which you would like to download the full content by tapping on the message header. You will see the down arrow marking these for download. When you are ready just tap the Connect button to begin the transfer.

## 12.1. Network Connection

If you have been using OneMail through a satellite connection and then move to a location where a Network or Wi-Fi connection to the internet is available, you can change your connection selection to "Network" to utilize the local connection.

## 12.2. File sizes

The file sizes you see in your OneMail Inbox after checking for mail are the UNCOMPRESSED sizes of these emails. The actual size of your download will be less, sometimes much less, than the sizes you see with your Inbox header.

If there is no size associated with an Inbox entry, this indicates that this email has already been downloaded by OneMail.

### 12.3. Transferring Photos

Check out this [discussion](#) of the photo compression and transfer approach used in OneMail. In short, OneMail compression is able to compress your photos immensely (often compressing multi-MB photos to 30KB) without rendering these photos into the size of a postage stamp as do other competing satellite mail services.

## 13. Contact Information

You can reach Support via

Email: [support@ocens.com](mailto:support@ocens.com) or

Phone: 001.206.878.8270 extension #2