



# InterConneX for iPad

## Pasteboard Exchange

### Overview

InterConneX is an iPad app that lets you create a repository of files and data right on your iPad. It provides for exchanging files and data between apps on your device, other devices — and even Macs — running ChronoAgent or InterConneX, remote files via an SFTP Server connection, as well as select cloud storage services. This can be particularly useful when you are away from your Mac and wish to access and manipulate files remotely.

### The Basics

The System Pasteboard is a region of memory on your device in which data can be shared. It is the mechanism that drives the Copy & Paste feature offered by so many apps. While there are many apps that support the document interaction model (explained in 'Document Exchange'), there are many more that don't. The number of apps that support the system Pasteboard is significantly larger, however. With using the document interaction model, you can pass word processing documents off to Pages for editing, but you cannot pass a JPEG or PNG image to Pages for placement within a word processing document. If you can get a PNG or JPEG image onto the pasteboard, however, then you **CAN** place it within a word processing document - or any other document that you may be editing so long as the app you are using can handle image data on the pasteboard.

This is where InterConneX comes in. It offers unique pasteboard support that allows you to transfer the contents of certain types of files to other applications via the system pasteboard.

### Tutorial

This tutorial will explain in detail the benefits of using pasteboard exchange and explain the differences between Local and Global Pasteboards. It also provides examples of instances in which each could be used. This tutorial will be accessing the Pages app. If you don't have Pages, another word processing app would likely be similar and you should be able to follow along using that.

When you are finished reading this document, read the other documents — Getting Started, Item Selection, Actions & Tools, Document Exchange, and Sharing with Others — to learn how to use specific areas of InterConneX in more detail.

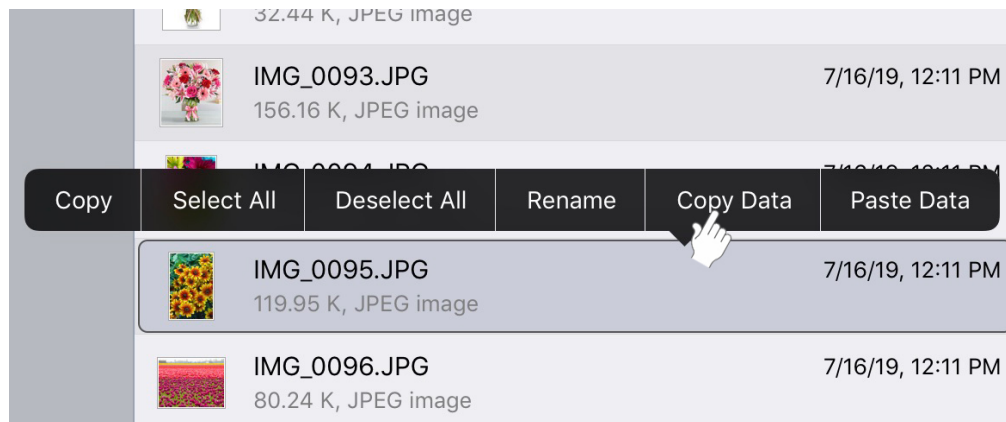
## Online Resources

This document and other online resources can be found on the Econ Technologies' website:

<https://www.econtechologies.com/icx-ipad-docs.html>

## Copying a File's Contents to the Pasteboard

- Tap and hold on an image file.
- The popup contextual menu will appear.
- Select "Copy Data" to copy the contents of the file to the pasteboard.



You may have to tap on the arrow that points to the right to view the remaining menu options.

InterConneX has placed the entire contents of the selected file on the pasteboard along with the UTI (Uniform Type Identifier) of the file, which is derived from the file's extension. For a JPEG file, this identifier is public.jpeg. Any application that supports the Pasteboard can examine its contents and determine if there is a data type it recognizes. In this case, Pages recognizes public.jpeg data and thus allows you to paste it into one of its documents.

- Exit InterConneX and open a document in Pages.
- Find a desirable location to paste the image.
- Tap and hold in a blank area on the page.
- The popup contextual menu will appear.
- Select "Paste" to paste the contents of the pasteboard to this location.

## My Garden Blog



- The image you copied in InterConneX is pasted into a Pages document!

# My Garden Blog

## **Annuals, Perennials and Landscaping**



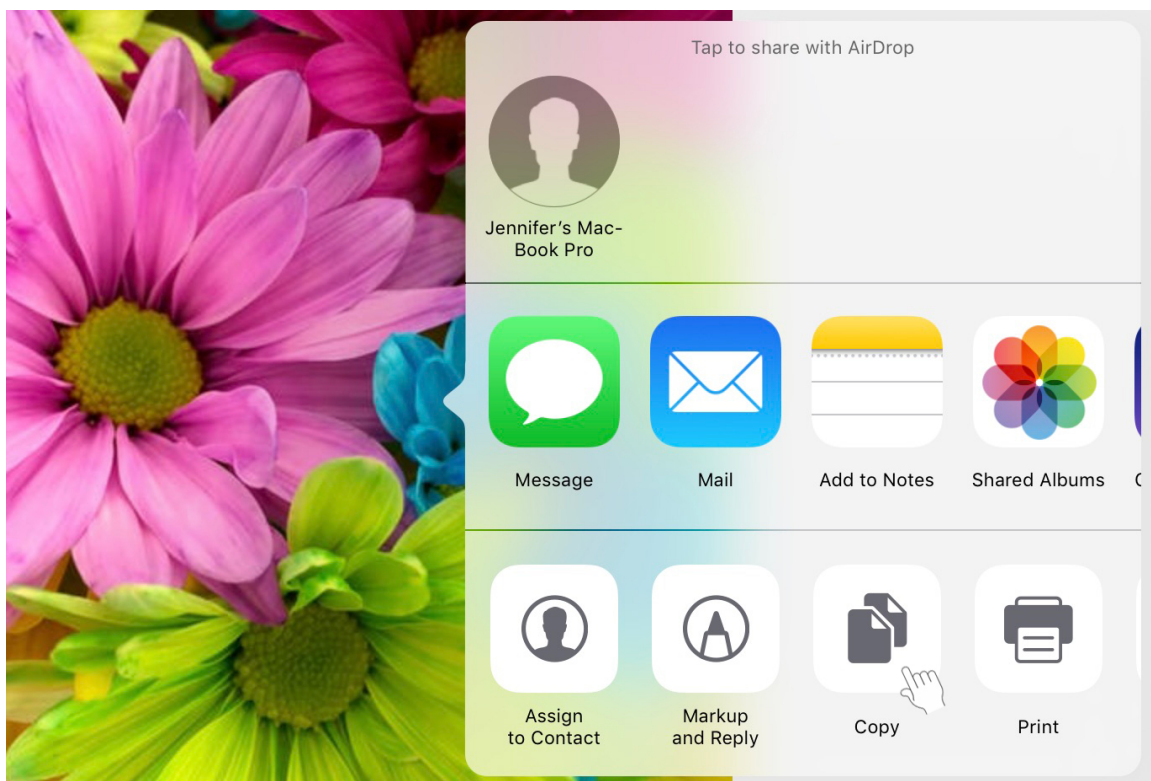
## Creating a File from the Pasteboard

In addition to copying a file's contents onto the pasteboard, InterConneX can create a file from the contents of the pasteboard. This allows you to copy data in another app, then switch to InterConneX to save that data as a file.

- Tap and hold on an image in an email.
- A popup appears that contains several options.

Unfortunately, “Open in <application>” (as discussed in the “Document Exchange” guide) is not one of them. However, you can “Copy” the photo, which places it on the system Pasteboard.

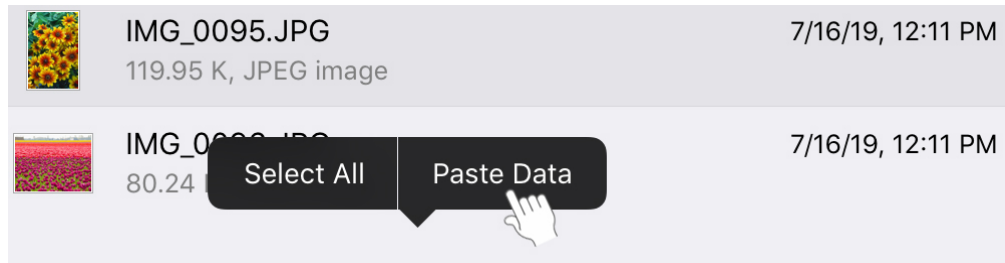
- Select “Copy” to copy the photo to the pasteboard.



- Exit Mail and open InterConneX.
- There are two ways to paste the image into InterConneX.

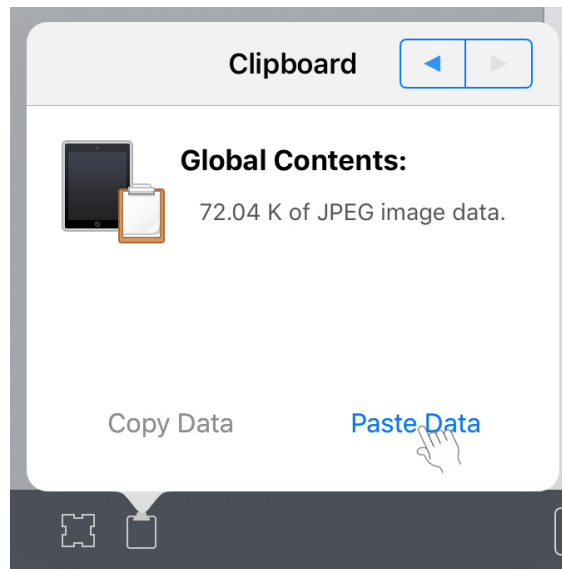
## METHOD ONE

- Tap and hold in a blank area within the sharespace you'd like to place the photo.
- Choose "Paste Data" from the popup contextual menu.



## METHOD TWO

- Tap the "Clipboard" icon located on the bottom toolbar.
- Choose "Paste Data" from the popup menu.



- Regardless of how you chose to paste the image, the "Paste Data as a File" popup will appear. Complete the options.
- Supply a file name.

Some types of pasteboard data have enough info accompanying it that a filename can be implied. If that is the case, a filename will already populate the "File name:" field. Otherwise, you'll have to tap this field to supply a meaningful name.

- Choose what type of data to paste.

An app can put multiple pieces of data into the Pasteboard. InterConneX does its best to try and guess what the most logical piece of data you would be interested in and it selects that for you. If there are multiple data types to choose from, you can specify

which one you really want by tapping it. Note: You will always have the “Snapshot of all pasteboard contents” as an option. This is used to create a “Clipping” file, which is discussed later in this guide.

- Rename if a duplicate exists.

This is usually on by default because it is the safest option. If the name you supply already exists, a different name with “copy” will be appended to whatever you specified for the file name. If you absolutely want the pasted data to overwrite an existing file, uncheck this option.

- Hide filename extension.





InterConneX does its best to choose the extension for you based on the data type you are pasting. If you wish to append the extension to the file name, simply uncheck this option. If you need to specify a different extension, uncheck this option and supply an extension in the “File Name:” field.

The screenshot shows a dialog box titled "Paste Data as a File". At the top left is a "Cancel" button, and at the top right is a "Paste" button. Below the title bar, there are three main sections:

- FILE NAME:** A text field containing the word "Flowers".
- DATA AVAILABLE TO PASTE:** A list of two items:
  - "JPEG image" with a size of "72.04 K" and a blue checkmark to its right.
  - "All pasteboard contents (clipping)" with a size of "72.04 K".
- OPTIONS:** A list of two options, both with blue checkmarks to their right:
  - "Rename if a duplicate exists"
  - "Hide '.jpeg' filename extension"

- Tap on “Paste” when you’ve completed these settings.

- You'll see the new file, selected, in your sharespace.

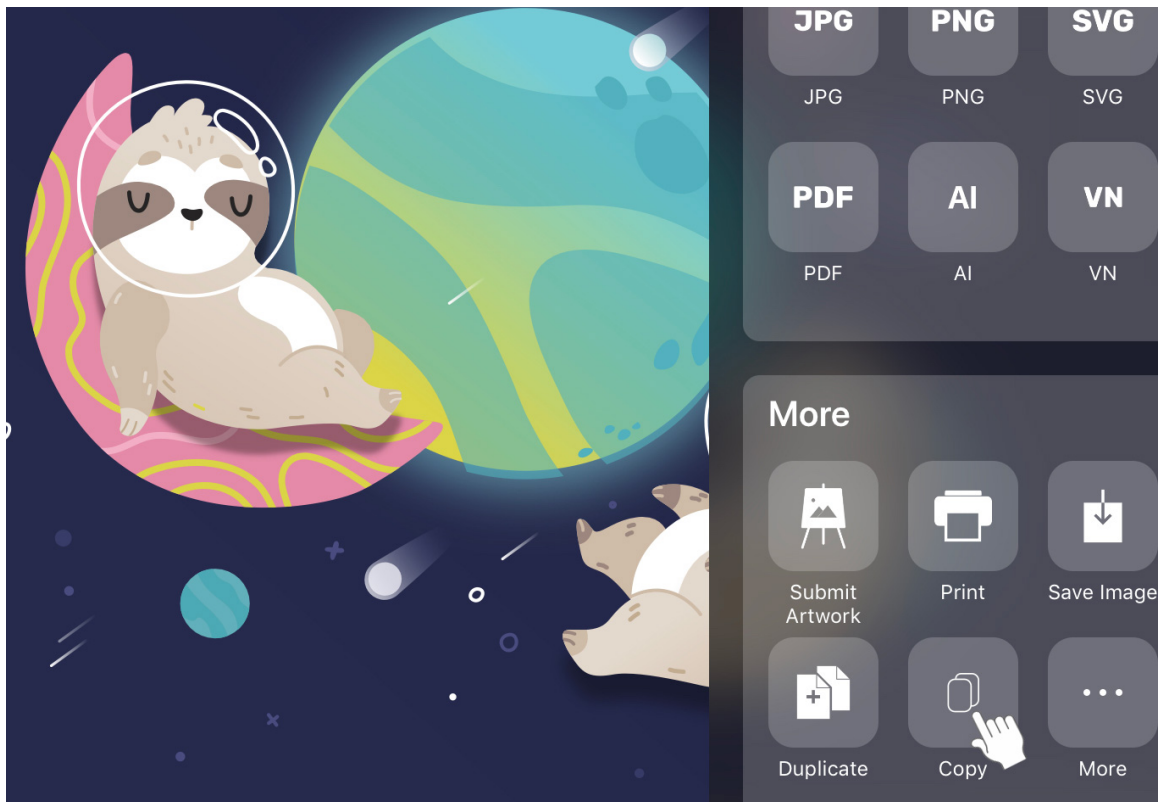
	1.5 MB, PDF document	
	<b>Flowers</b> 72.04 K, JPEG image	7/16/19, 1:04 PM
	<b>IMG_0092.JPG</b> 32.44 K, JPEG image	7/16/19, 12:11 PM
	<b>IMG_0093.JPG</b> 156.16 K, JPEG image	7/16/19, 12:11 PM



## Creating “Clipping” Files

An application may choose to place multiple pieces of data into the pasteboard. This extra data is usually for the application's own benefit should you choose to paste that data elsewhere in the same application.

- Open a vector drawing program like Vectornator.
- Open a document and make changes to it.
- Select “Copy” to copy the document to the pasteboard.

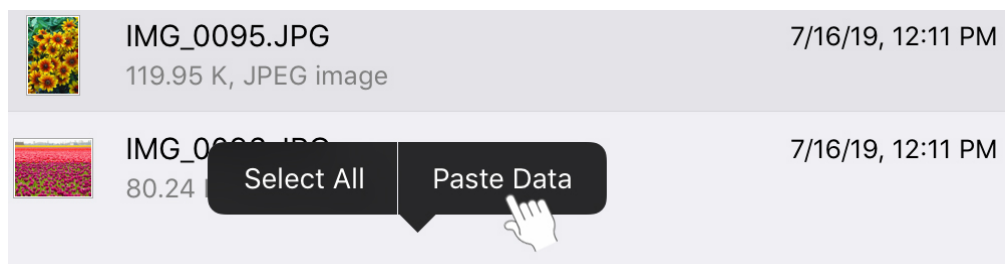


Vectornator not only places the JPEG image there, it also places the extra information about how you have scaled, rotated and stylized the image. Other applications may not know how to interpret all this extra information, so if you paste the contents of the pasteboard to another app, all you are likely to get is the original image — all the scaling, rotating and style information is ignored.

- Exit Vectornator and open InterConneX.
- There are two ways to paste the image into InterConneX.

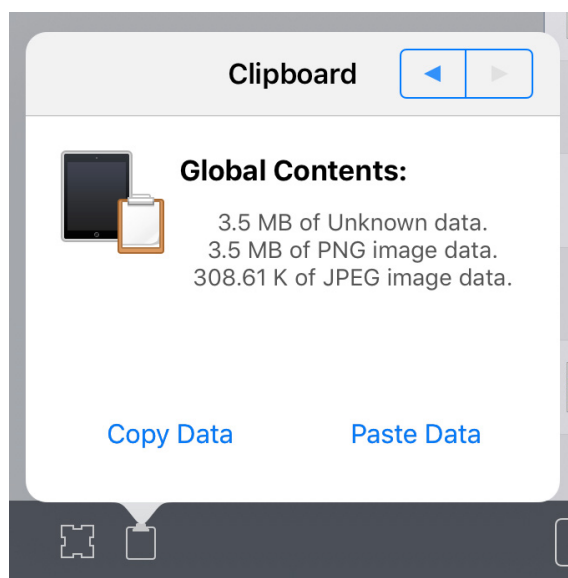
## METHOD ONE

- Tap and hold in a blank area within the sharespace you'd like to place the image.
- Choose "Paste Data" from the popup contextual menu.

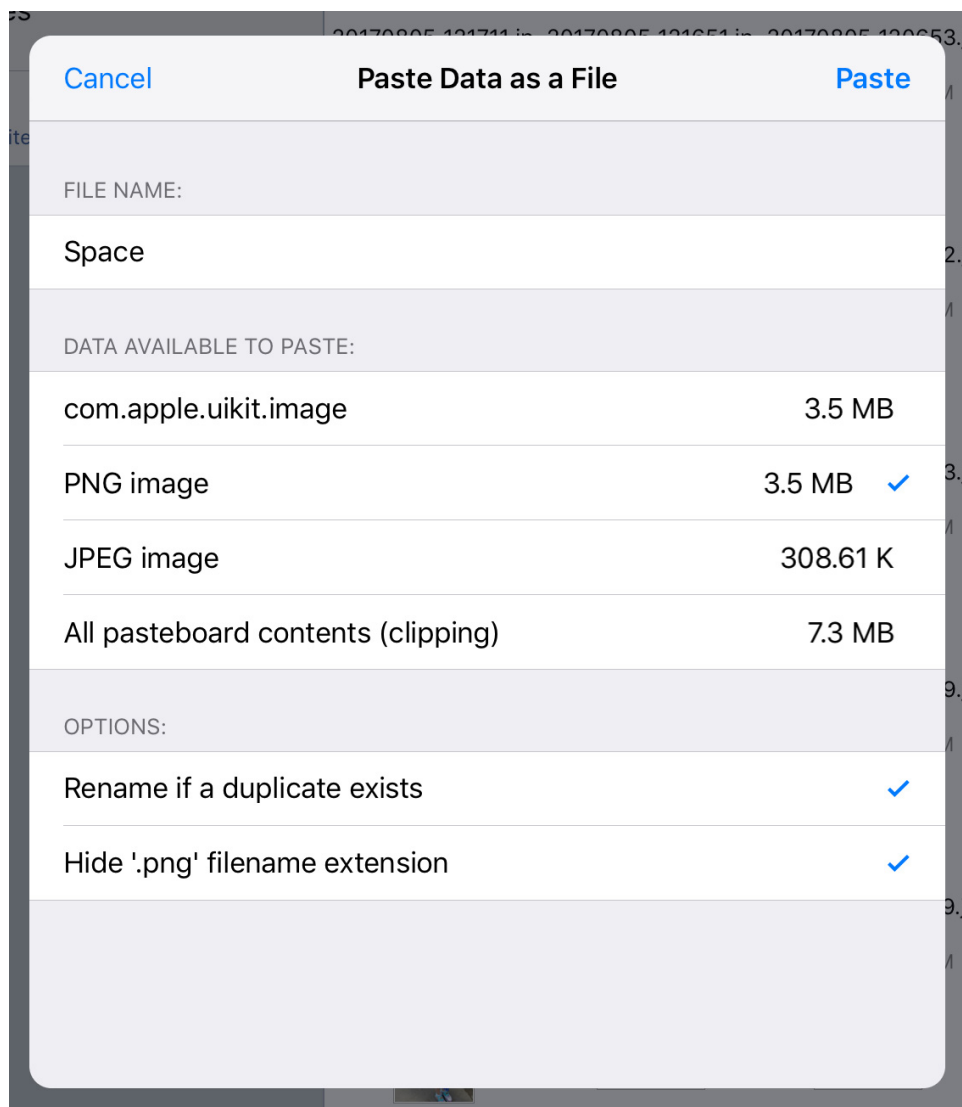


## METHOD TWO

- Tap the "Clipboard" icon located on the bottom toolbar.
- Choose "Paste Data" from the popup menu.



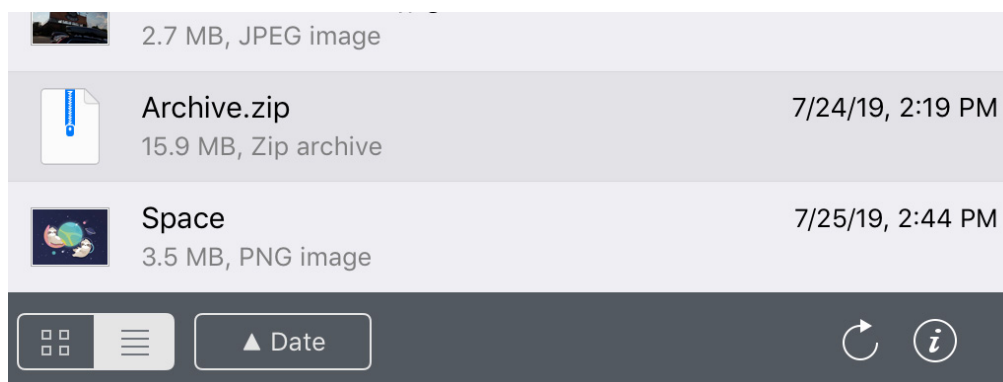
- The “Paste Data as a File” view appears.



- Choose “All pasteboard contents (clipping).” The “All pasteboard contents” option allows you to save the entire contents of the pasteboard to a file.

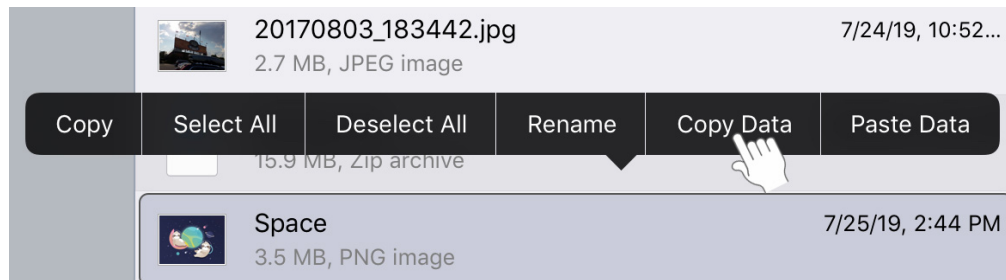
All the options are explained in the previous example.

- A “clipping” file will be created.



A clipping file is not very useful by itself. You cannot view it in QuickLook or transfer it to another application via document interaction. What you CAN do, however, is use the “Copy Data” function in InterConneX to copy the entire contents of the file to the system pasteboard.

- Tap and hold on the clipping file.
- The popup contextual menu will appear.
- Select “Copy Data” to copy the contents of the file to the pasteboard.



You may have to tap on the arrow that points to the right to view the remaining menu options.

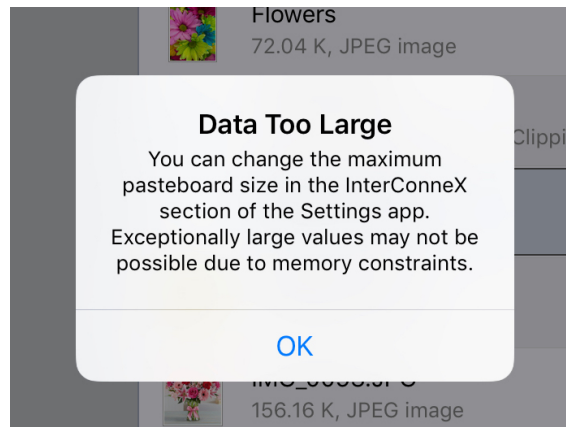
This essentially restores the pasteboard to the state it was in when the clipping was made. In this example, all of the extra data that Vectornator placed inside the pasteboard will be restored. Thus you can switch back to Vectornator, paste the pasteboard contents, and the image along with all its attributes (shadow, style, etc.) will appear.

This feature allows you to create a library of objects created in a specific application (such as Vectornator) and then repeatedly reuse those objects, long after the original document that you created them in is gone. You can even pass them to other devices simply by copying the clipping file (or emailing it)!

## Dealing with “Data too Large” Errors

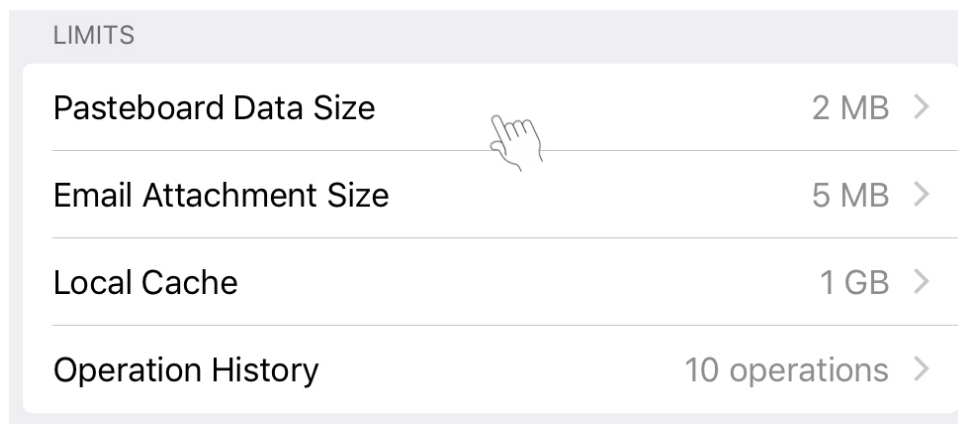
InterConneX limits the amount of data that can be copied to the system pasteboard. This is mainly for your benefit so that you don't accidentally choose to place an enormous amount of data on the pasteboard without realizing it. Memory is precious in iOS and if you try to occupy too much of it, the app may crash.

- Tap on a large image file to select it.
- Select “Copy Data” to copy the image to the pasteboard.
- You will be presented with a “Data Too Large” warning.





If you start using the pasteboard to exchange data a lot, you will quickly run into this barrier.

- You can change the “Pasteboard Data Size” in the InterConneX Settings app.



The higher settings are probably safe for later generations of iPad but, as usual, your exact results may vary. It should be pointed out that 20MB is an extremely large amount of data and you will rarely need to exchange that much via the pasteboard.

 **Pasteboard Data Size**

1 MB	
2 MB	✓
5 MB	
10 MB	
20 MB	
50 MB	
100 MB	
200 MB	
500 MB	

## The Pasteboard Utility

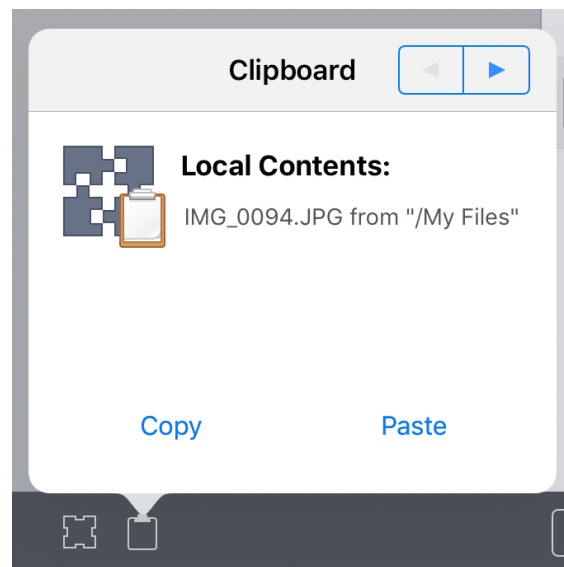
Most system pasteboard operations are invoked via the contextual pop-up menu that appears when you tap-and-hold within a sharespace folder. The Pasteboard Utility can be invoked by tapping the 'Clipboard' icon in the bottom toolbar. It simply provides a different interface for the same functionality.

InterConneX actually maintains two pasteboards: a 'local' one and a 'global' one. The 'global' pasteboard is the system pasteboard and is the implied pasteboard for all of the above examples. The Pasteboard Utility provides a summary of the contents of each pasteboard.

- You can change which pasteboard you are looking at via the arrow buttons in the navigation bar or by side-swiping.

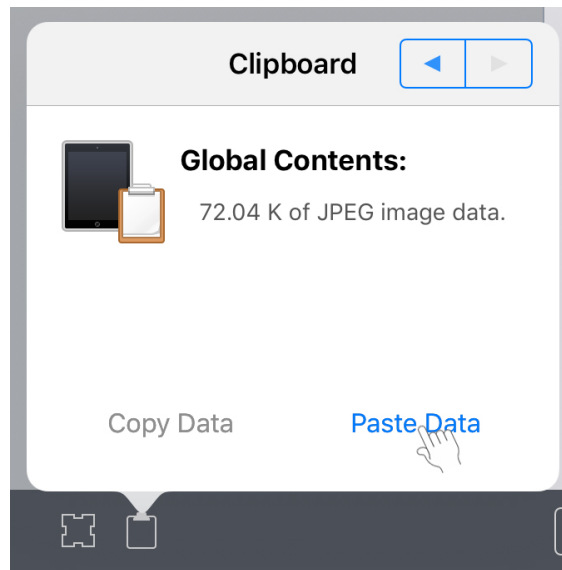
### Local Pasteboard

InterConneX allows you to select one or more files and invoke "Copy" on them. You can then switch to another sharespace (or folder within the same sharespace) and perform a "Paste." This will essentially copy the files from their original location to the current one. The data on the local pasteboard is simply a reference to the file(s) you selected — it has no meaning outside of the InterConneX application and thus we choose not to "pollute" the system pasteboard with this information.



- For each particular pasteboard, you can also invoke Copy or Paste functions for them. If the function is not available (e.g. there is no item selected and thus nothing to Copy or there is no data on the pasteboard hence nothing to Paste), the associated button will be disabled.

Here's an example of the Global Pasteboard.



Tip: To differentiate between the two pasteboards when invoking the contextual popup menu, just remember that the terms “Copy” and “Paste” refer to the local pasteboard. The terms “Copy Data” and “Paste Data” are referring to the global (system) pasteboard.

## Conclusion

Now that you have learned the benefits of using pasteboard exchange and the differences between Local and Global Pasteboards, you should read the ‘Sharing With Others’ tutorial to learn how to create sharespaces that others can connect to and how to create a sharespace that connects to other devices.