

Installation and Configuration Guide for the Cloudpond S3 Connector Version 4.1 with Mass File Migrator



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Introduction

Welcome to the Cloudpond S3 Connector! Cloudpond S3 Connector is the fastest, easiest to install, and most geographically focused and user friendly S3 Connector for Salesforce. Starpond Software proudly presents the Cloudpond S3 Connector 4.1 for Salesforce. Cloudpond will allow your organization's Salesforce platform to connect quickly and easily to Amazon S3 as a Native Salesforce Application! What does this mean to you? As a Business Owner or Business Manager, it allows you to keep your costs down and your productivity up. No middle servers involved and store your important files in your own country, region, jurisdiction. Again, we are glad you are here, and please let us know if there is any way we can assist you. You may call support at any point during this setup process for immediate assistance or questions with Phone Support, US EST (703) 486-6258.

Prerequisites

This guide and installation manual assumes the reader has an existing account in Amazon AWS as well as a Salesforce Production or Developer Organization. We will also assume that the reader has a good working knowledge of both Salesforce CRM objects, Custom Objects, Salesforce 1 Mobile for iOS, Salesforce Communities, Salesforce Lightning Experience, Amazon Web Services, S3 Buckets and the ability to secure your data while it resides in an AWS S3 Bucket. Please setup an S3 Bucket in your AWS region of choice prior to installing Cloudpond. Inside of your S3 bucket please create a folder (name of your choice). We will call that the root folder from here on out.

Background

Cloud storage and third-party apps to manage your files can be expensive for organizations with multiple employees. Integration software licenses can cost thousands monthly for your organization plus the skilled staff needed to monitor the integration. With Amazon S3 Storage available to everyone on the planet and the reasonable prices that are offered for AWS S3 storage, we are proud to offer Cloudpond S3 Connector Version 4.1 which allows the World's Best CRM to connect to the World's best Cloud storage at an annual license fee that even a small business can afford. Whether you have one employee or one thousand employees using Salesforce, ..one price will license your entire company org! Cloudpond S3 Connector was first accepted into the Salesforce AppExchange in 2014. We built Cloudpond to serve our consulting customers because there was no existing app like it and we have been serving the entire Salesforce Community ever since! We have thousands of users all over the Globe, and we look forward to helping your Salesforce and AWS S3 storage integration. Cloudpond is localized to accommodate the English, Spanish, French, German, Hindi, and Urdu languages.

What's new in Cloudpond Version 4.1?

Three Panels to choose from

What's new in Cloudpond? We now offer a choice of four panels to choose from. Just place one of the three Cloudpond panels on your page layout and you are ready to go. Cloudpond S3 Connector gives you the option of 3 Different Visualforce Panels to place on your Lightning, Classic or Mobile Page Layouts. The panels will also work in Salesforce Communities. Each panel is designed for a different type of use case.

- 1) **Cloudpond Migration Panel** (Advanced Features) - This panel is considered an advanced functions panel for a Salesforce administrator or a trusted power-user, and it allows the user to upload, download and migrate files and attachments from inside Salesforce into the Cloudpond S3 Connector file system in your chosen S3 Bucket. It also allows you to migrate files from other areas in S3 that may have been uploaded from a different source. Once the migrated files are in Cloudpond, you will be given the option to delete the original files and clear up the space where the files originally resided. It also allows Email S3 Files to Contacts and Request Uploads via sending them an Email link.
- 2) **Cloudpond Email Panel** (Regular Panel, Standard Features + plus Email S3 Files to Contacts and Request Uploads via sending them an Email link.

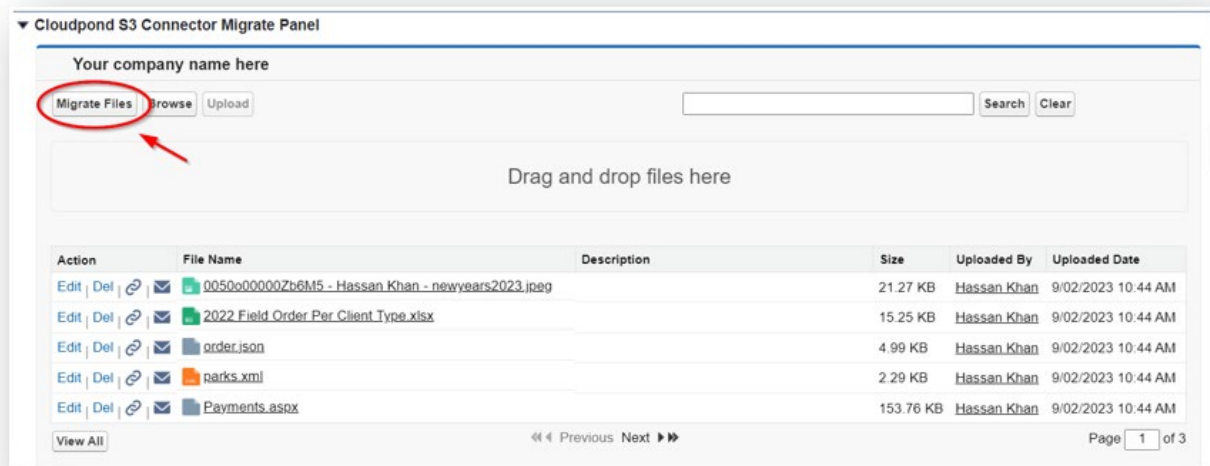
- 3) **Cloudpond Panel** (Regular Panel, Standard Features) – This panel is considered the standard panel for a regular user and allows uploads, downloads, signed links and email capabilities.
- 4) **Cloudpond Read Only Panel** (Restrictive Read Only Features)– This panel allows users only to read and download files that have been uploaded for that record.

The idea behind having three different types of Cloudpond panels is that not all Salesforce Users should have all Cloudpond's Advanced Features. A Salesforce Administrator can choose the features that each user should have on each type of page layout, they can then assign page layouts appropriately. One use case example would be that perhaps you only want customers who log in to a Salesforce Community to be able to download a set of instruction manuals or videos. In this case you would want to place the **Cloudpond Read Only Panel** on their page layout. In another use case you may only want Salesforce Administrators to have the **Cloudpond Migration Panel**. This would be because the **Cloudpond Migration Panel** allows its users to do mass file migrations from Files and Attachments from existing files on the record inside Salesforce, transferring them over to the Cloudpond files structure in AWS S3. In addition, with the Cloudpond Migration Panel, one can migrate files that may already be existing somewhere else inside the S3 bucket (including files that are affiliated with other Salesforce Records). The ability to migrate files is a function that would commonly only belong to a Salesforce Administrator, hence, the special Migration Panel. Other external files that are targeted to be migrated into the Cloudpond file system from S3 would have to be moved to inside the range of the Cloudpond root folder.

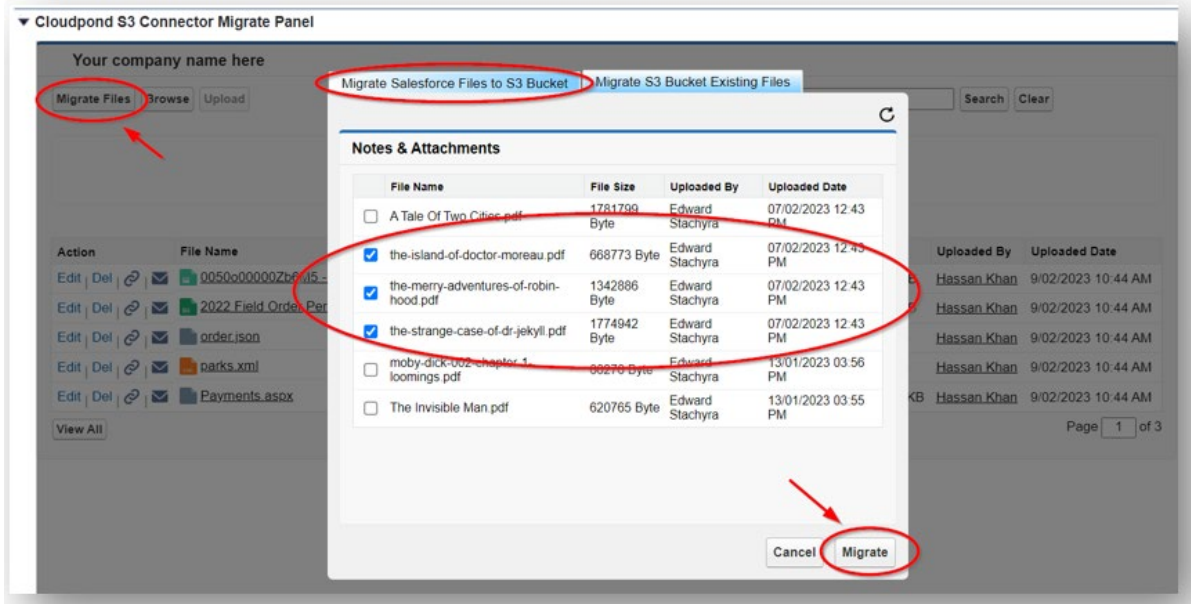
The Three optional Cloudpond Panel Examples are shown below:

The Cloudpond Migrate Panel (Admin / Power User Panel)

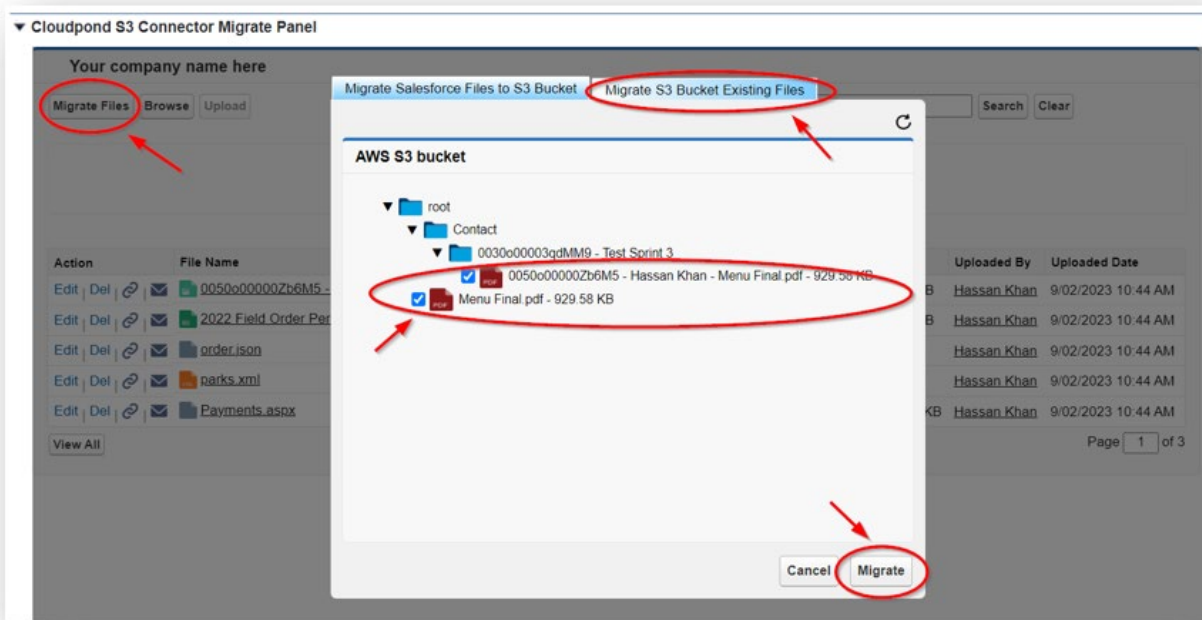
The **Cloudpond Migrate Panel** is the only panel that has the **Migrate Button**



The **Cloudpond Migrate Panel** can migrate files and attachments that already exist in Salesforce

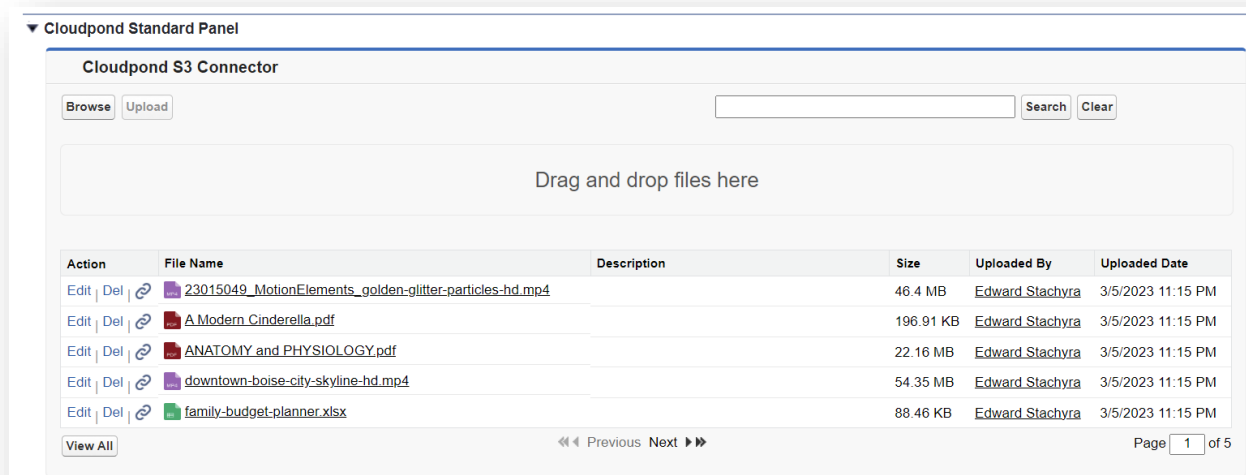


The *Cloudpond Migrate Panel* can also migrate external files that already exist inside of your AWS S3 Bucket. Any other S3 files that you wish to migrate in to Cloudpond will need to be moved inside of the range of the Cloudpond Root Folder.



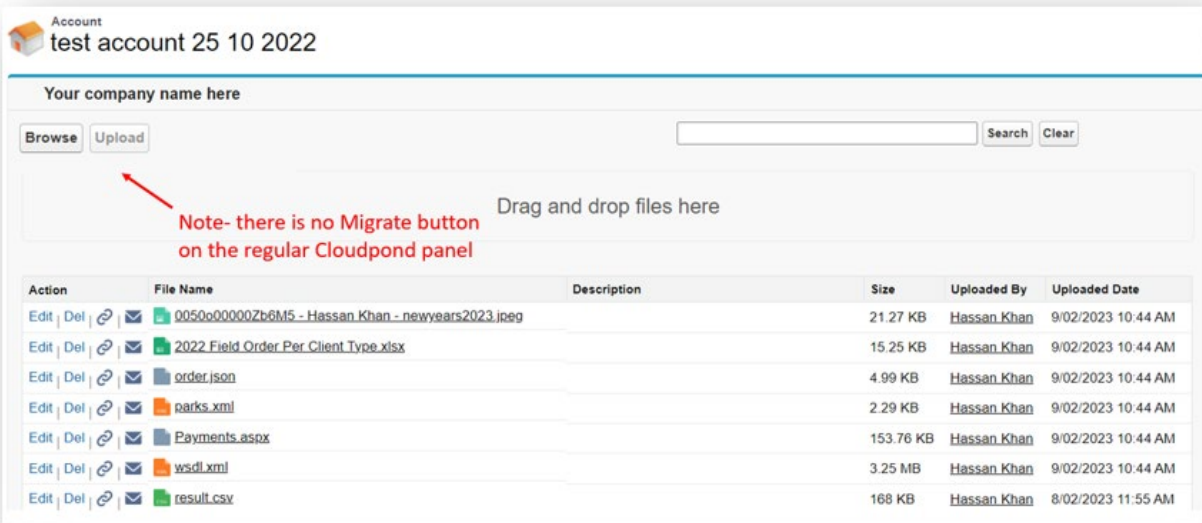
The Cloudpond Panel (Standard User Panel)

The regular Cloudpond Panel is for normal Salesforce users who are intended to upload and download files into the Cloudpond File System.



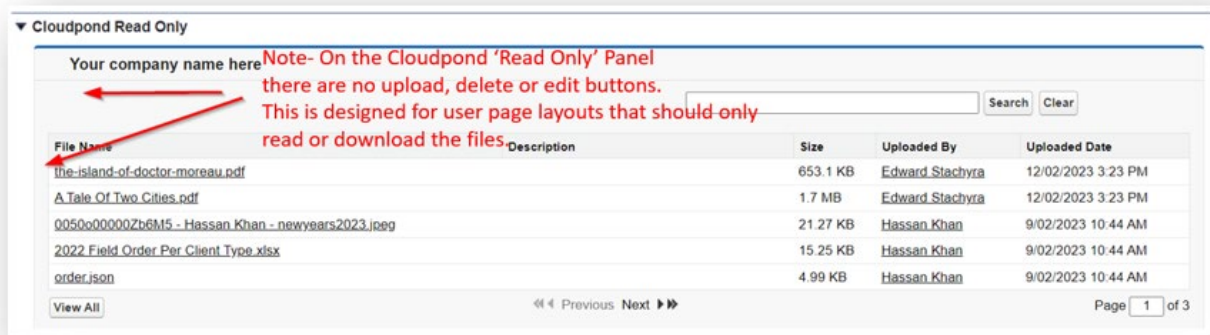
The Cloudpond Email Panel (Standard User Panel plus Email Feature)

The Cloudpond Email Panel features the regular Cloudpond Panel for normal Salesforce users who are intended to upload and download files into the Cloudpond File System plus the send an email feature to send S3 email links and request that customers upload S3 files from outside Salesforce.



The regular Cloudpond Visualforce Panel does not give the user the ability to migrate files and the migrate button is not available to this panel. The Cloudpond Migrate capability is intended for Administrators and Power Users, hence the migrate features are not available on the regular Cloudpond Panel. In most cases, the regular Cloudpond panel would be placed on page layouts where you have granted access to regular Salesforce Users. The Cloudpond email panel is the same as the regular panel but has the email features.

The Cloudpond Read-Only Panel (Restricted User Panel)



The Cloudpond Read Only Visualforce Panel is intended for situations where only want users to view or download files. The Cloudpond Read Only Panel will not allow users to delete, modify or upload files. A use case example for this would be where you have made files available to your customers in a Salesforce Community, but you do not want those customers to have the ability to upload, modify or remove the files that are presented to them on a record's page layout.

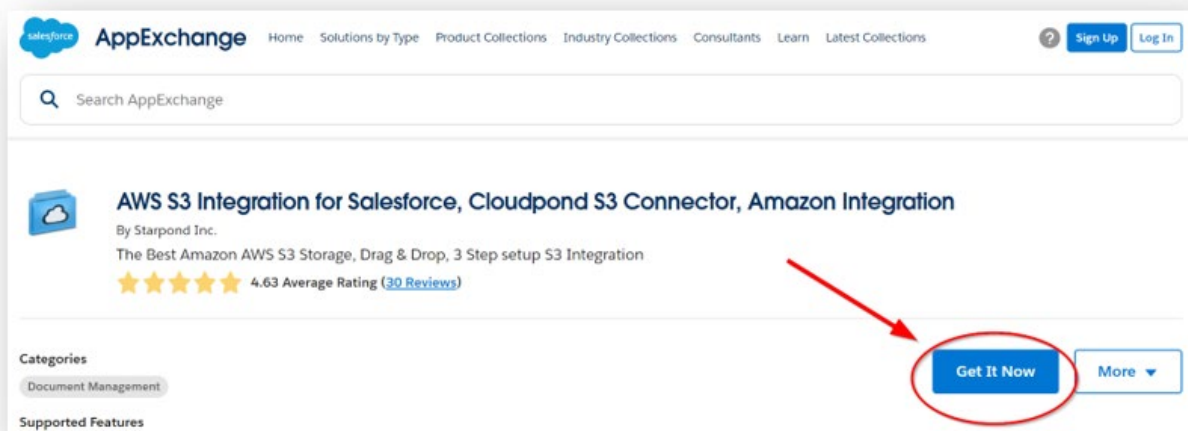
Cloudpond Installation Steps

Install the Cloudpond S3 Connector Managed Package while signed in to your production Org, Developer Org or a Sandbox navigate your browser to you will be prompted to install the managed package.

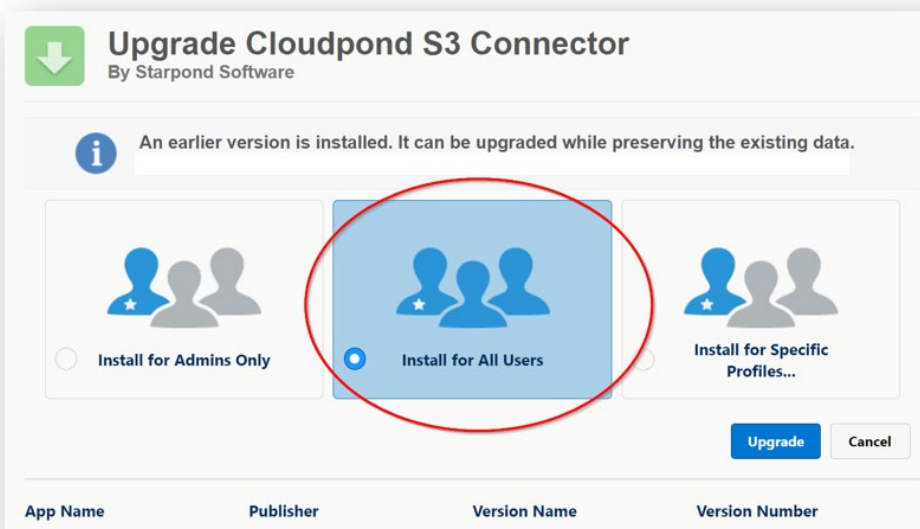
Begin the installation by clicking the **'Get it now'** button here:

<https://appexchange.salesforce.com/listingDetail?listingId=a0N3000000B5YzrEAF&tab=e>

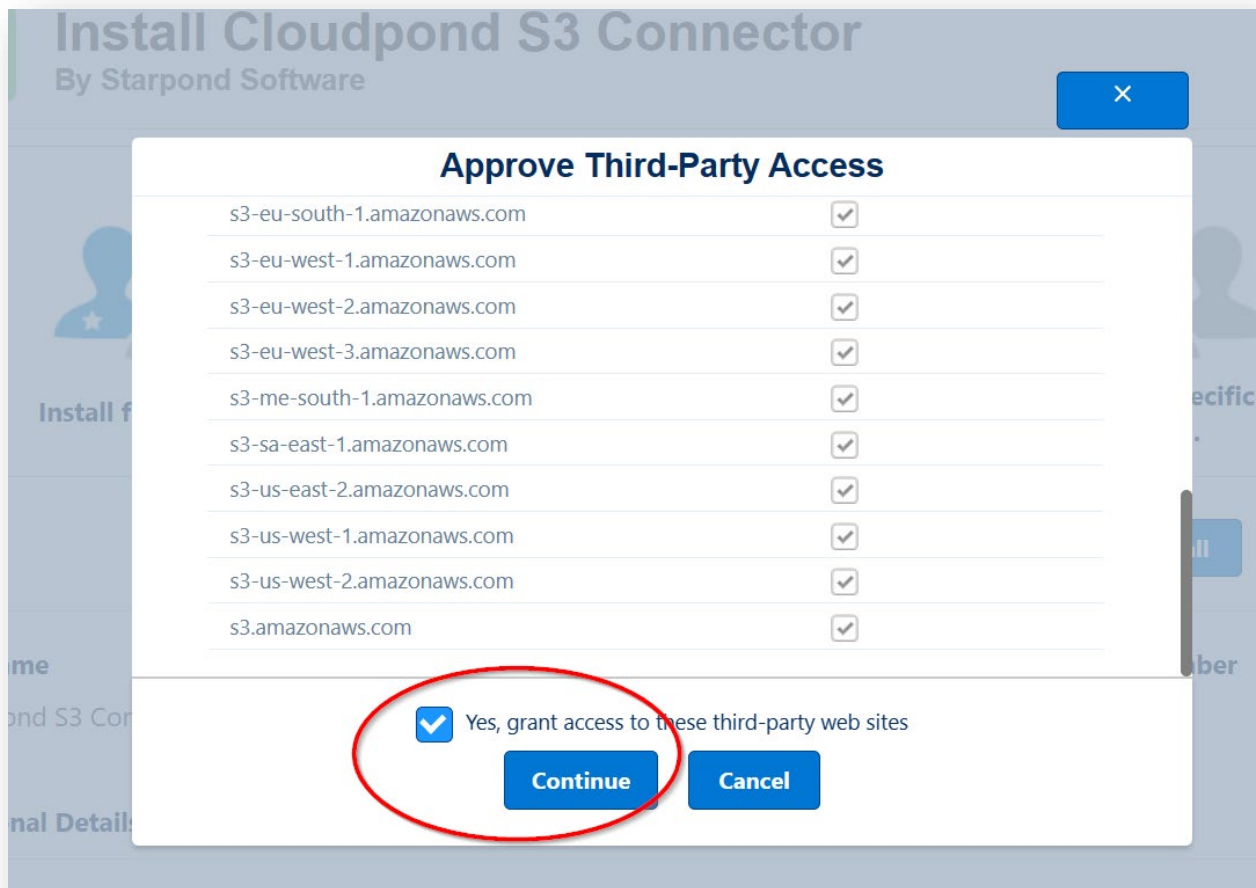
Step 1. Click on the Get it Now button in the Salesforce AppExchange.



Step 1A. Approve the package API Access and AWS Regions and [Grant Access to All Salesforce Users](#)

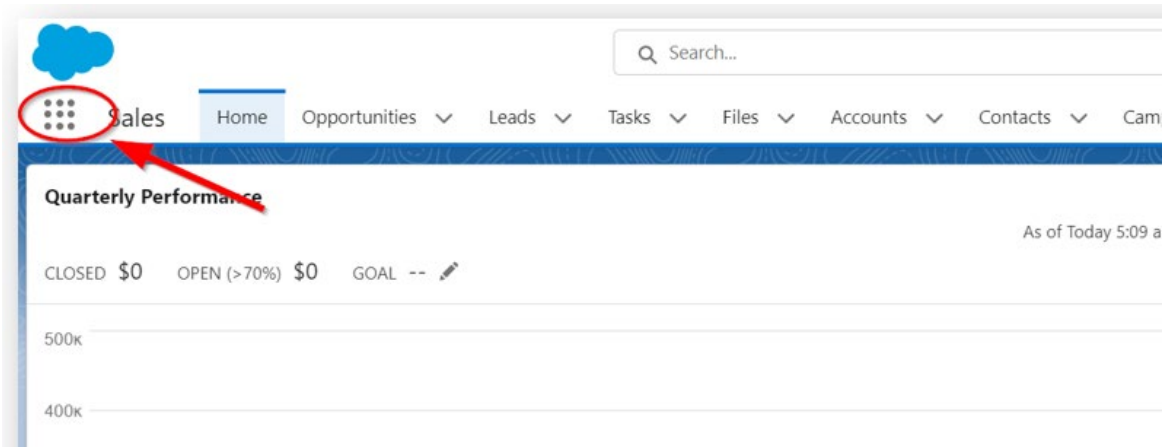


This approves all users to utilize the app and allows you to connect to any AWS Geographic region you want to choose.

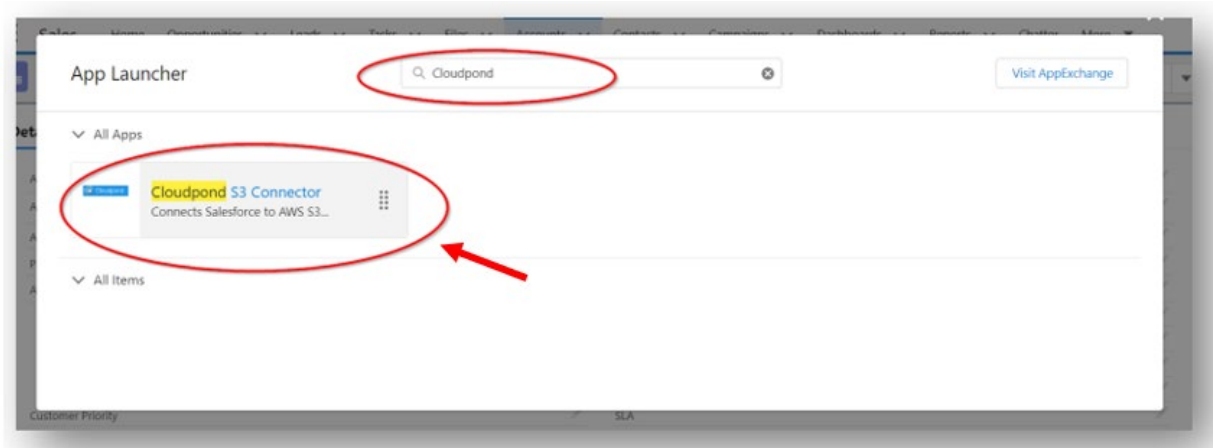


Step 1C. Confirm that the Package Install is Complete, Go to the Cloudpond App and Click on the Configure Button

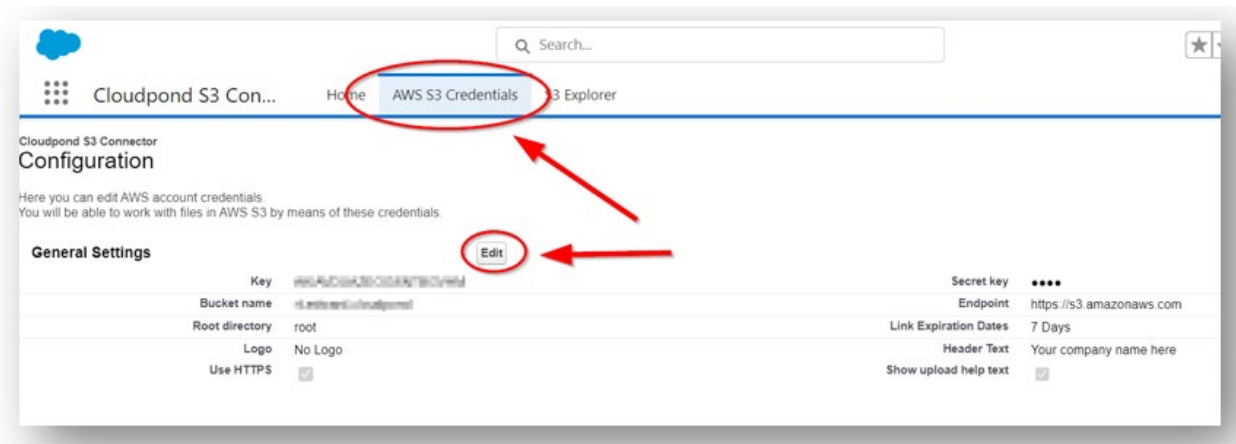
Step 1D. Click on the Salesforce App Launcher (the nine dots in the upper left corner)



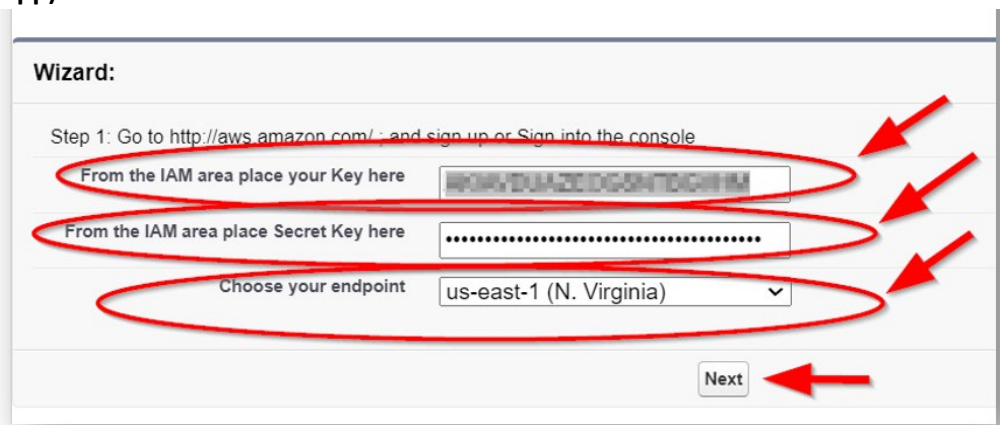
Step 1E. Click on the Cloudpond S3 Connector App



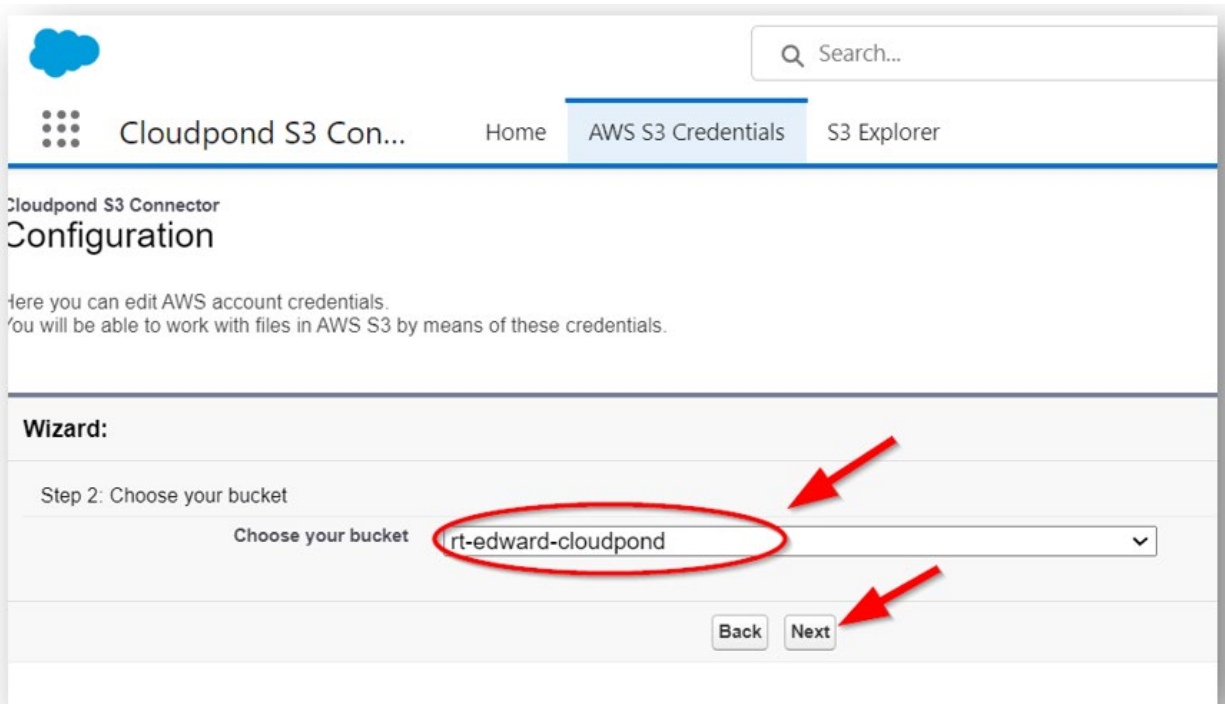
Step 1F. Click on the 'AWS S3 Credentials Tab' and then the 'Edit' button.



Step 1G. Enter your User Key This is from your Amazon AWS Account and your Secret Key (from your Amazon AWS Account) and then select the region in which your Amazon AWS pre-made S3 bucket exists (you will have to create those in Amazon AWS prior to choosing them in the Cloudpond App). Then click Next.



Step 1H. [Select your chosen bucket.](#) This bucket should have been previously created in AWS S3 and from the same previously chosen AWS region. Cloudpond does not create the bucket for you. You will have to create the bucket in AWS S3 and then choose it in Cloudpond. Then click the next button.



The screenshot shows the Cloudpond S3 Connector Configuration Wizard. The top navigation bar includes the Cloudpond logo, a search bar, and tabs for 'Home', 'AWS S3 Credentials', and 'S3 Explorer'. The main heading is 'Cloudpond S3 Connector Configuration'. Below this, a message states: 'Here you can edit AWS account credentials. You will be able to work with files in AWS S3 by means of these credentials.'

The wizard is at 'Step 2: Choose your bucket'. It features a label 'Choose your bucket' followed by a dropdown menu. The selected option in the dropdown is 'rt-edward-cloudpond', which is circled in red. A red arrow points to the dropdown menu. Below the dropdown are 'Back' and 'Next' buttons. A red arrow points to the 'Next' button.

Step 1i. Select your root folder inside of your chosen bucket. The root folder is where the file and folder structure will go (you can name the root folder any name you like, in this case we named it 'root'). The root folder must have been previously created in the Amazon AWS S3 bucket you have chosen (Cloudpond does not create the root folder for you, you have to create it in AWS before choosing it). Accept the default settings or adjust the settings as shown here and click on the 'Save' button. You are now ready to add Cloudpond S3 Connector to your page layouts.

Wizard:

Step 3: Choose your root folder in the bucket

Choose your root folder in the bucket root ▾

Back

General Settings

Link Expiration Dates 7 Days ▾

Logo No Logo ▾

Header Text Your company name here

Use HTTPS ☒

Show upload help text ☒

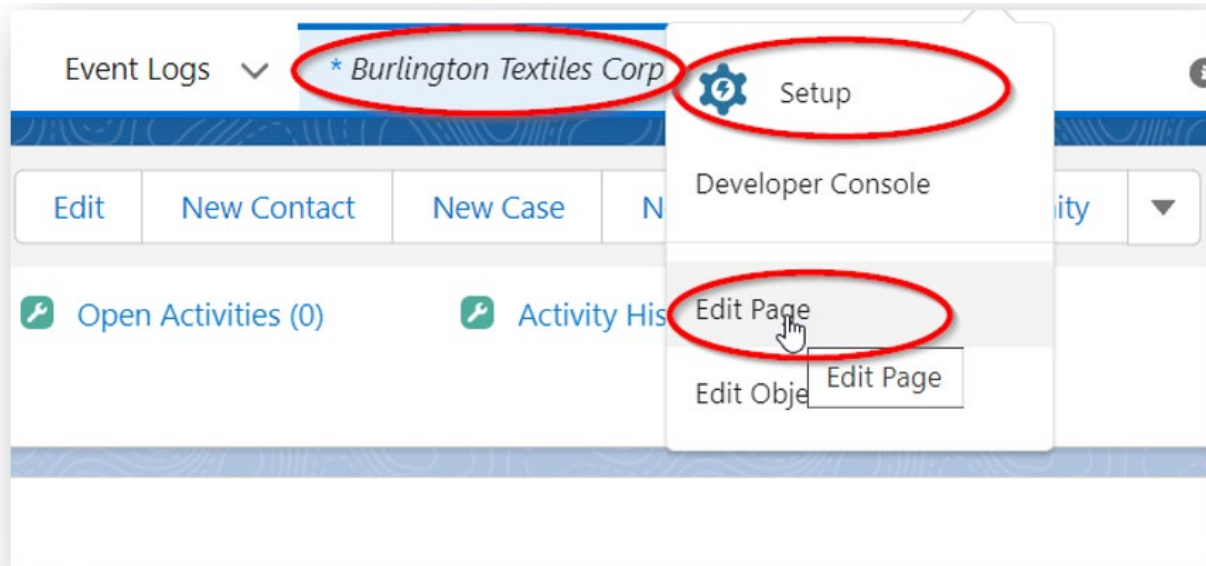
Save

Having any trouble setting up Cloudpond S3 Connector, up to this point?

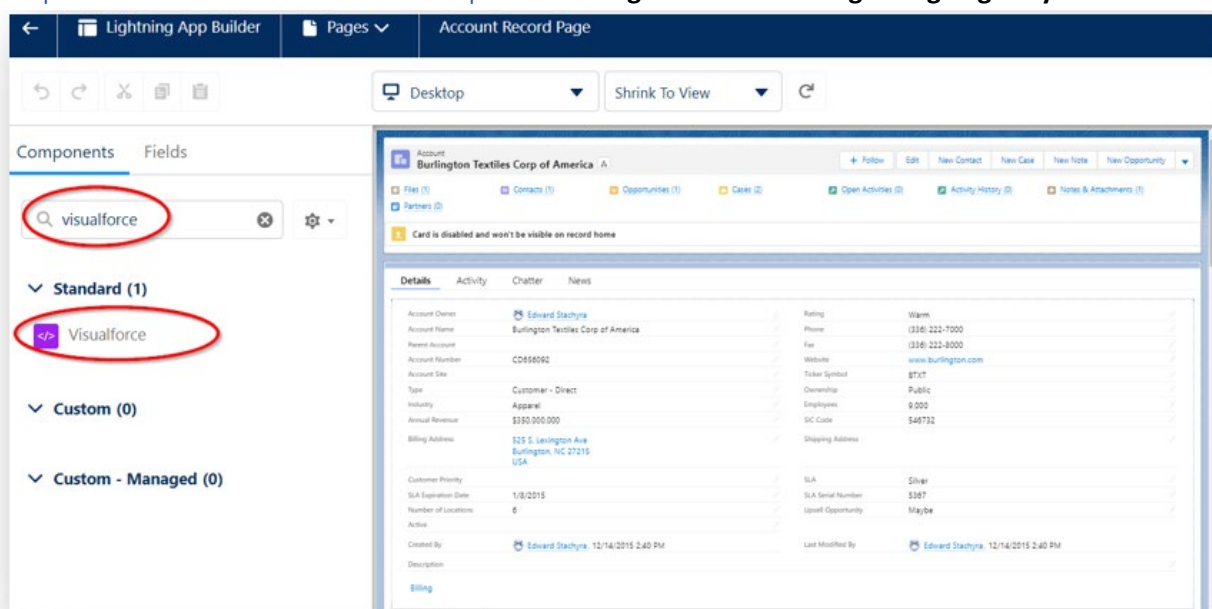
If so, give us a call, and we can quickly jump on a Zoom Session and quickly navigate you through the process.

Phone Support: USA (703) 486-6258, USA - Eastern Standard Time

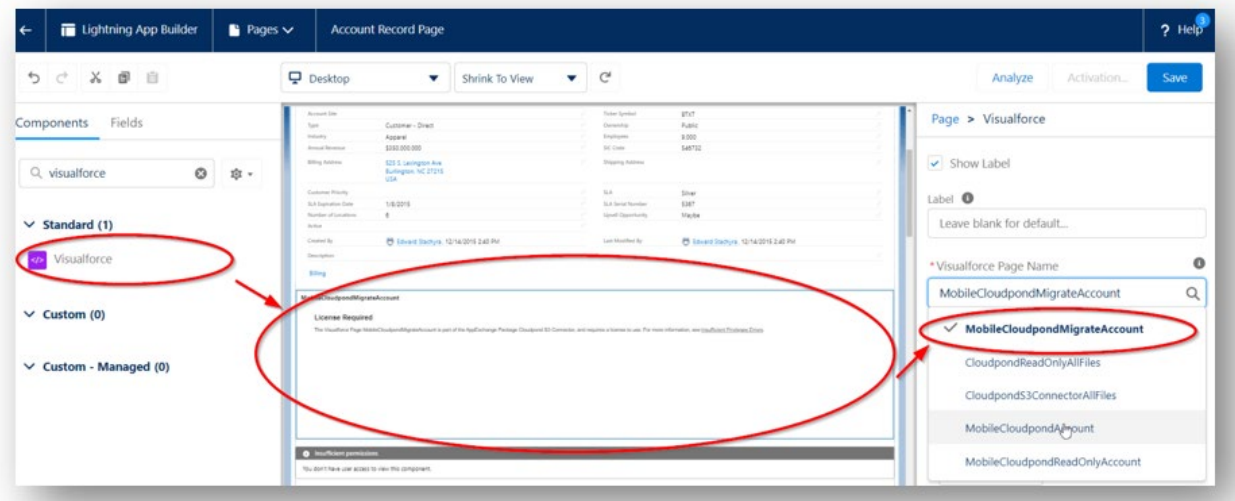
Step 2a. Add Cloudpond to a Lightning Page Layout (Account). While on an Account Record Page (in this case it's the Burlington Textiles Corp Account Record Page), go to the Setup icon in the top right hand corner and choose 'Edit Page' from the drop-down.



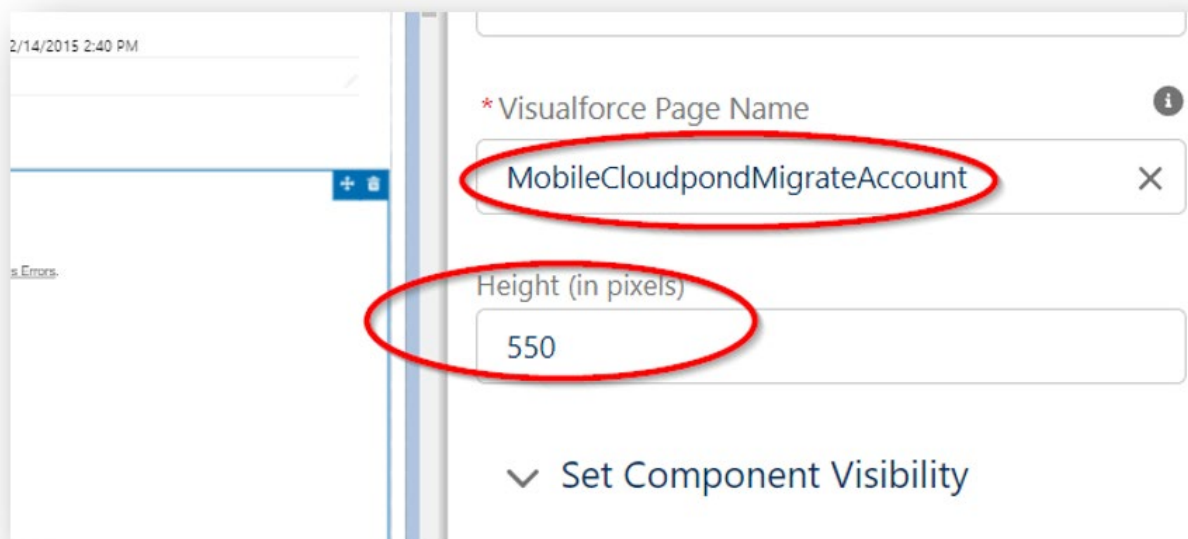
Step 2b. Find the Visualforce Component. Drag one out to the Lightning Page Layout.



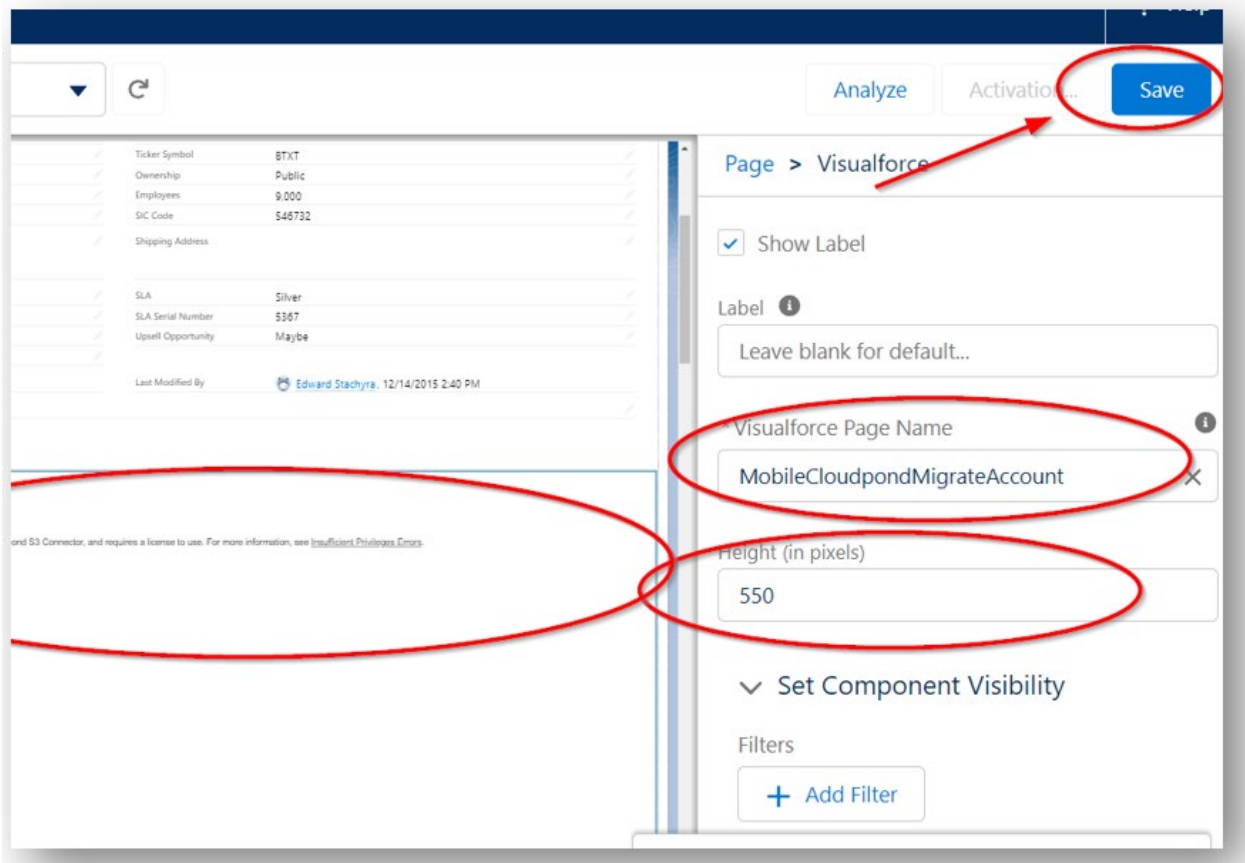
Step 2c. Choose the Visualforce Page Name and pixel size.



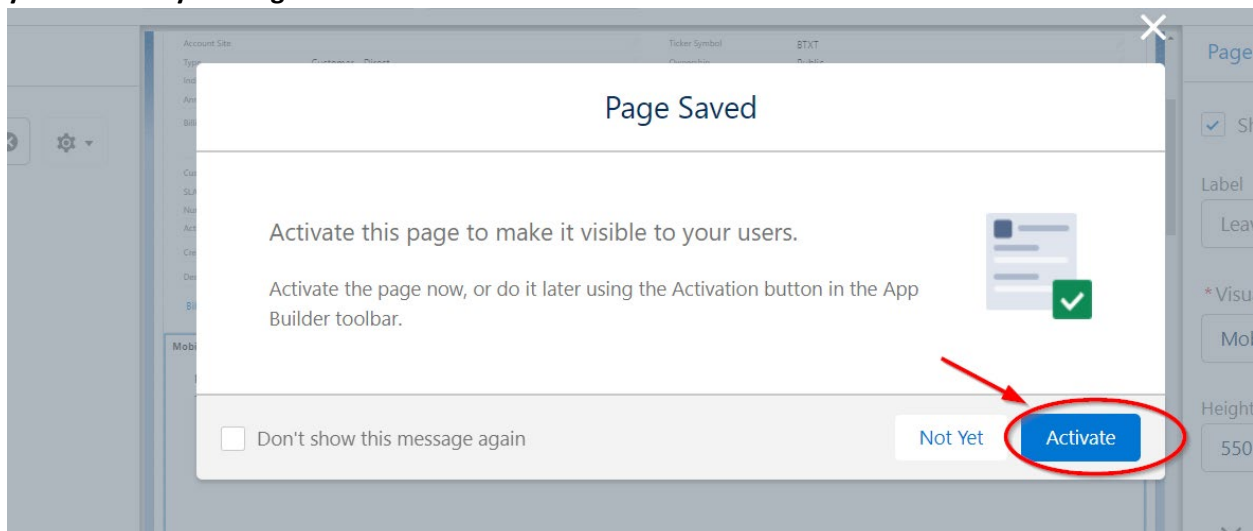
Step 2d. Set the Visualforce Panel to 550 pixels in height.



Step 2e. Save the Lightning Page Layout. Now click on Save (upper right corner) to save the Account Lightning Page Layout with the new Cloudpond VF Panel on it.



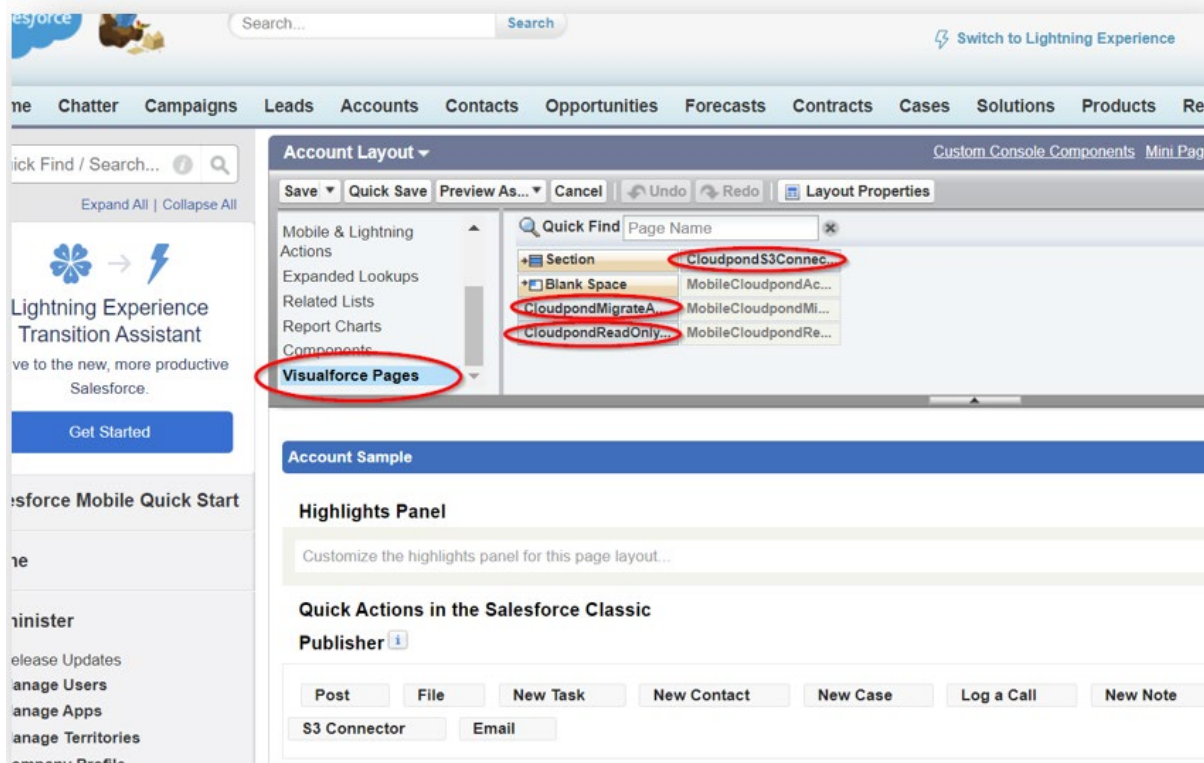
Step 2f. Activate the page and set it as default for users. Now 'Activate' the new page layout you created by clicking the 'Activate' button.



Salesforce Classic Page Layout Instructions

Choose one of the three Cloudpond Panels available for Classic Page Layout

Go to Account page layout in Salesforce Classic and click edit. Note in the top of the page under custom console components at the far left you will scroll down to show visualforce components which are available for the page. You can choose from the **Migrate Panel** (advanced features) or the **Cloudpond S3 Connector panel** (regular features) or the **Cloudpond Read Only Panel** (restrictive features to only read and download files). Depending on your need you can assign one of these Cloudpond visualforce panels to the page layout. Choose one and drag it down to a section you have created on the page layout. Drop it on the page layout. Drop it on the page.



Prior to saving the page layout see image below to adjust the pixel height to 550 and ensure to check the show scroll bars checkbox as well. After this you can save your page layout.

Custom Object Support

Custom Object Support for Salesforce and Custom Visualforce Pages for Mobile. The same as above applies for Salesforce Mobile and Lightning Experience only you will have to make a 2nd Visualforce Page for the Mobile Cards and Lightning experience pages.

For a custom object page layout, you can create a visualforce page with the following content and add this visualforce to object layout: where TestObject_c is your custom object API name.

```
<apex:page standardController="TestObject__c" tabStyle="TestObject__c">
  <cps3:CloudpondS3Connector objectName="TestObject__c"/>
</apex:page>
```

where TestObject__c is your custom object API name.

There is an extra step to allow the custom VF Page on the Mobile cards area. Go to Setup->Develop->Pages the click on the page you have just made for mobile (similar to above) and **then check the box Available for Salesforce Mobile Apps**. The below depicts where to find the checkbox Available for Salesforce Mobile Apps for your reference even though it is not on a custom object

The screenshot shows the Salesforce Visualforce Page configuration page for 'cps3__MobileCloudpondAccount'. The page is divided into several sections:

- Page Detail:** Includes fields for Label (MobileCloudpondAccount), Namespace Prefix (cps3), and a checkbox for 'Available for Salesforce mobile apps' which is checked. It also shows 'Require CSRF protection on GET requests' as unchecked, 'Last Modified By' as Edward Stachyra, and 'Created By' as Edward Stachyra.
- Package Information:** Shows 'Installed Package' as Cloudpond S3 Connector and 'Available in Package Versions' as 1.20 - 1.21 (Current).
- Visualforce Markup:** Displays the Visualforce page code:

```
<apex:page standardController="Account">
  <cps3:CloudpondS3Connector objectName="Account"/>
</apex:page>
```

Support for S3 Versioning

The Cloudpond S3 Connector has also been tested to work in conjunction with S3 versioning. You will not see any of the older versions of your S3 files inside of Salesforce

Support for Salesforce Communities

Cloudpond S3 Connector has been tested and also works in conjunction with Salesforce Communities. You also have the same selection on the three panels to choose from.

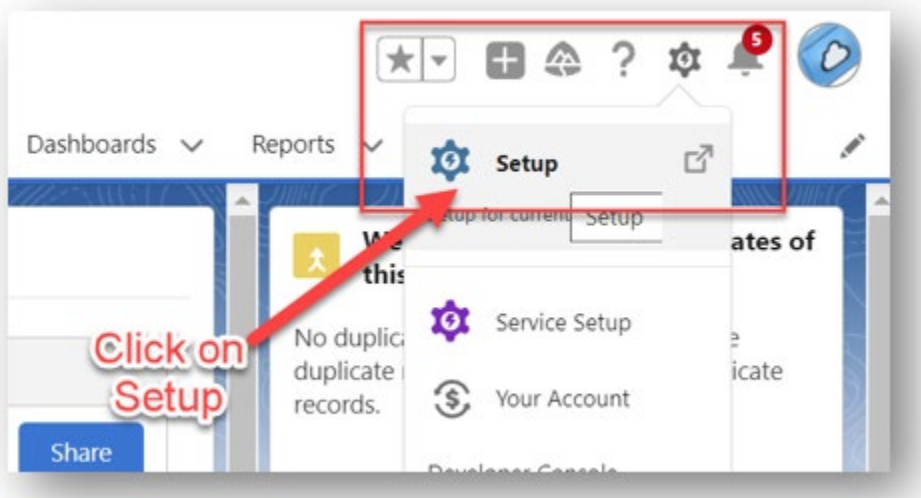
Cloudpond Email Panel with Upload Instructions

Adding a Salesforce Site to upload attachments from outside Salesforce

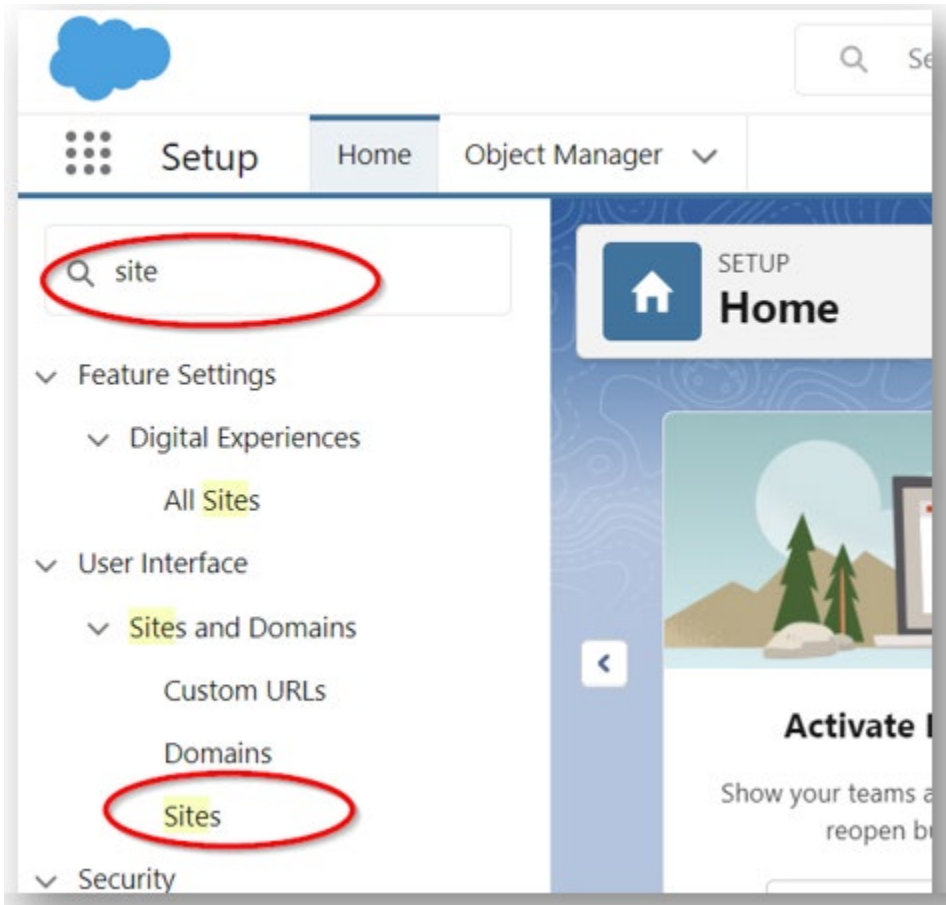
When the Cloudpond Email panel is used on a page layout, the user will have the ability to send email download links to customers. They will also have the ability to send an email request for customers to upload files into Cloudpond and have them go directly into the intended record.

This external upload capability is possible through the use of a Salesforce Site. A salesforce site is a public website where an application can be directly integrated into Salesforce without requiring users to login with a normal Salesforce username and password. The Cloudpond App installation does not make a Salesforce Site for you, but a Salesforce Administrator can make one and then include the two Cloudpond Visualforce Pages that are placed into the site to allow the email upload function to work.

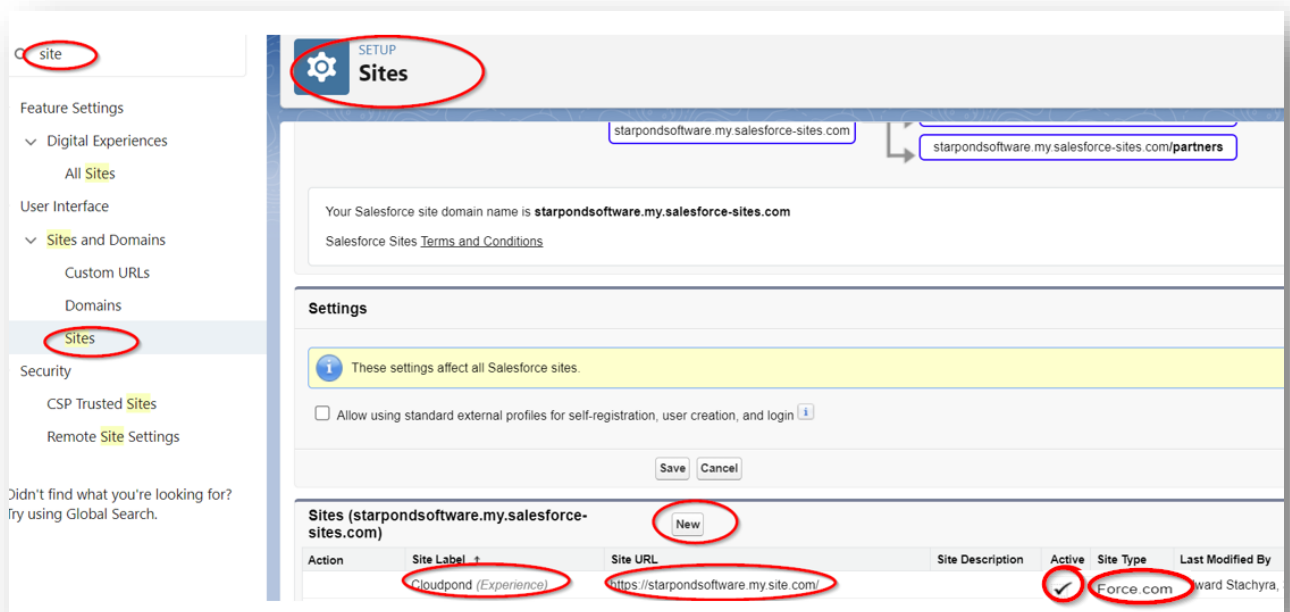
Creating a Salesforce Site for Email requested Uploads



Click on setup and navigate to the left hand side of the screen and search on keyword 'site'. Go to – Sites and Domain -> Sites. See image below.



After that, click on Sites. Create a new Force.com Site. You will need to name it a unique name.



Sites (starpondsoftware.my.salesforce-sites.com)						
New						
Action	Site Label ↑	Site URL	Site Description	Active	Site Type	Last Modified By
	Cloudpond (Experience)	https://starpondsoftware.my.site.com/		☒	Force.com	ward Stachyra,

The Cloudpond S3 File Mass Migrator

Cloudpond Version 4.1 features a **Mass Migrator** feature which allows customers to migrate all of their files and attachments to AWS S3 with a few simple clicks. ***If the 2nd action is chosen: Migrate files to S3 and Delete files from Salesforce, it will delete your Salesforce files and clear up your file storage in Salesforce.*** Our mass migrator can be found in the Cloudpond App next to the S3 Explorer Tab and AWS S3 Credentials Tab.

The screenshot shows the Cloudpond Mass File Migrator interface. The top navigation bar includes tabs for 'Cloudpond S3 Con...', 'Home', 'AWS S3 Credentials', 'S3 Explorer', and 'Mass Migrator'. The 'Mass Migrator' tab is active. Below the navigation bar, the 'Cloudpond Mass File Migrator' section is displayed. On the left, under 'Select Object', a list of Salesforce objects is shown, with 'Account' selected. On the right, under 'Choose an action to Perform', two radio button options are present: 'Migrate files to S3' (which is selected) and 'Migrate files to S3 and Delete files from Salesforce'. At the bottom, there is a section for 'Add recipients to send Email (Optional)' with a 'To:' field and a search icon.

The Mass Migrator page needs to stay open through the mass migration process, it is important to note that the **Mass Migrator is not a batch file process and is instead an active page using Apex and REST API calls into S3 to copy your organizations files to S3.** The Mass Migrator can be ran more than once as it utilizes **upserts** to copy your organization's files from Salesforce into AWS S3. It will not create duplicate files in AWS S3 if you run it multiple times. You can run the Mass Migrator multiple times **before deciding to run it with the delete feature.** It is important to note that you should run the 'Migrate files to S3' migration before you decide to run the 'Migrate files to S3 and **Delete files from Salesforce**' feature, so that you can verify the files are moved to S3 and ensure they are in place and presented on your page layouts before you decide to use the delete files from Salesforce feature. **Caution should be used when running it with the delete feature as it will permanently delete your files from the Salesforce Database.** You should always do a test run first within a sandbox environment to

ensure your files are presenting as expected when copied over to the S3 bucket. Again, do not run the delete feature till you are certain your files are present as expected in AWS S3.

Cloudpond File and Folder Naming Convention in AWS S3

The Cloudpond Naming convention for AWS S3 is as follows:

The Cloudpond S3 File naming pattern is:

{Id file record} - {User name} - {Original file name}

Just follow the pattern with your filenames when using another application to upload files and they will appear in Salesforce as well, so long as they are in the correct folder.

The Cloudpond S3 Folder naming pattern is:

The Folders inside the Cloudpond S3 Connector follow a similar pattern as the files:
folder naming pattern is

{parent_record_Id: accountid, contactid...} - {record Name}

Support for Moving folders to a New Bucket

The Cloudpond S3 Connector is a modular system in which you may move or copy all of the folders to a new bucket. Just re-point the Cloudpond S3

Connector Configuration in Salesforce to the new bucket, and Cloudpond S3 Connector will register your new bucket and its folders/files.

AWS S3 Special Permissions needed from your organization's AWS Administrator for the Cloudpond Credentials to be placed in Salesforce

Special considerations with AWS and permissions

- 1) You need to create a Bucket (or choose an existing one) in your chosen Geographic Region'
 - You need to then create a 'root' folder in your AWS S3 bucket. This is the dedicated folder what Cloudpond will use inside that bucket. This step is often overlooked.
 - Then you must connect Cloudpond through the setup steps under the 'AWS S3 Credentials' tab.
- 2) The bucket and the user credentials you are using must have permissions to that bucket (it is common in large organizations for the AWS Admin to have limited S3 Bucket permissions for internal users and placed restrictions that may prevent Cloudpond from having communication with your organization's bucket.

If you are dealing with restrictive permissions scenario, you can ask your AWS Admin for

the following AWS S3 permissions needed for the Cloudpond Credentials inside Salesforce. Your AWS Admin will need to grant these:

```
"Effect": "Allow",
"Action": [
"s3:AbortMultipartUpload",
"s3:DeleteObject",
"s3:DeleteObjectVersion",
"s3:GetBucketAcl",
"s3:GetBucketCORS",
"s3:GetBucketLocation",
"s3:GetBucketLogging",
"s3:GetBucketNotification",
"s3:GetBucketPolicy",
"s3:GetBucketTagging",
"s3:GetBucketVersioning",
"s3:GetLifecycleConfiguration",
"s3:GetObject",
"s3:GetObjectAcl",
"s3:GetObjectTorrent",
"s3:GetObjectVersion",
"s3:GetObjectVersionAcl",
"s3:GetObjectVersionTorrent",
"s3:ListAllMyBuckets",
"s3:ListBucket",
"s3:ListBucketMultipartUploads",
"s3:ListBucketVersions",
"s3:ListMultipartUploadParts",
"s3:PutBucketAcl",
"s3:PutBucketCORS",
"s3:PutBucketLogging",
"s3:PutBucketNotification",
"s3:PutBucketTagging",
"s3:PutObject",
"s3:PutObjectVersionAcl",
"s3:RestoreObject"
```

Support for Versioning

The Cloudpond S3 Connector has also been tested to work in conjunction with S3 versioning. You will not see any of the older versions of your S3 files inside of Salesforce.

Questions or Support

Please contact sales@cloudpond.com. Also, you may call USA EST 1-703-486-6258 for support (USA EST). We are happy to help guide you through or answer any questions!