LaciCloud Help

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INTRODUCTION

LaciCloud is an FTP based cloud-storage that is very privacy centric and has many advantages over typical cloud storage services – but you can read more about that at lacicloud.net.

Before starting I want to clarify a few things – mainly the misconceptions about FTP that plagued it for ages.

FTP IS NOT OLD

The original FTP protocol was specified in RFC 114, 16 April 1971. This version still ran on NCP, the predecessor of TCP/IP. Later, it was replaced by RFC 765 (June 1980) and RFC 959 (October 1985). This is the current FTP specification, however it has been amended lots of

times, implementing passive mode (RFC 1579), security extensions (RFC 2228) and IPV6 support (RFC 2428).

Most FTP servers and clients implement the latest FTP amendments, and are being currently developed with new features.

FTP IS NOT INSECURE

This one I see a lot, and while FTP **is** insecure (transmits data over clear-text), people don't realize that FTPS exists (FTP over SSL/TLS) and dangerously misinterpret this as the whole protocol and all its forms are insecure.

HTTP is also insecure, but then HTTPS came along (HTTP with SSL/TLS), which is what you use for banking, emailing, social media.

HTTPS is no more secure than FTPS.

In this chapter you will get to know how to setup your LaciCloud account and the basics of using the interface.

CREATING AN ACCOUNT

Creating an account should be fairly straightforward. After going to lacicloud.net, click on the 'Register' item in the top right corner of the menu or simply type the URL lacicloud.net/create in the URL bar. From here on you should see this page:

CREATE AN ACCOUNT

Password

Retype Passowird

Captcha

I agree to the Terms and Conditions

Enter your details, the captcha code (case-insensitive), and finally agree to the Terms and Conditions (https://lacicloud.net/resources/lacicloud.legal.pdf).

Your password must follow these rules:

- Must be 8 characters or longer
- Must contain a number
- Must contain an alphabetic character

You will receive an email with a clickable link in order to confirm your account. If you don't see an email please check your spam folder.



LOGGING IN

Applying the same logic as before, now instead of 'Register' click 'Login', however this shouldn't be needed as **after** confirming your account you will be automagically taken to the login page.

After entering your details, you will be redirected to the Interface page.

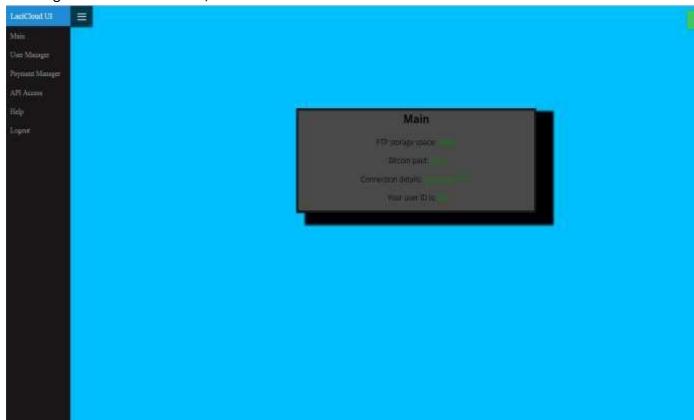
The 3D Interface



The interface may change according to your device's and browsers capabilities. If browser detection fails, you can always switch to compatibility mode by click the green 'Basic UI' button, and vice-versa.

To navigate the 3D interface, you can either use the arrow keys, use your mouse, or if you device is touch capable use the touchscreen (for example on smartphones), and if all else fails, you can simply use the 'LaciCloud UI' menu to switch between sides.

To navigate the basic interface, use the 'LaciCloud UI'



The Basic Interface

The interface and all its elements are subject to change without notice.



In this chapter you will get to know the basic features of LaciCloud.

CREATING AN FTP USER

After creating your LaciCloud account (hereafter referred to as the 'account'), you should use your free FTP space (1024MB at the moment) to create an FTP user. Click on 'User Manager' or navigate the 3D cube until you land on this page:



On this page you will see your currently active FTP users (you can see I have a 'phone' user – it's for my phone) and the total number of FTP users, along with your maximum user limit (by default it is 5).

Click on the 'Add User' button.



The Add FTP User page

But before we proceed, I'll explain the structure of FTP users.

When you create your account (**Not an FTP account, but your normal one**), a special directory is created only for you;

/path/to/users/directory/\$id where \$id is your user id.

This is your own special sandboxed directory where all of your files will be stored.

Now, there are 2 types of FTP users: Normal and Master

When you create a **normal FTP user**, a directory will be created using the starting directory that you specified for your FTP user like this:

/path/to/users/directory/\$id/\$starting_directory where \$id is your user id and \$starting_directory is your FTP users name.

This will be the directory you are chrooted to when you log in via FTP.

But if you create a master FTP user (this is done by setting the starting directory to '/'), the FTP user will be created at /path/to/users/directory/\$id, so just your special root directory, and thus a master FTP user can see all of the normal FTP users files.

You **can** create an FTP user with a starting directory of a subdirectory of a previous FTP users subdirectory, and you can create an FTP user with a nested starting directory (ie starting directory has multiple sub-directories).

About the .ftpquota file: This file counts the total number of MB's you upload in your directory, and once the limit is hit, the FTP server won't allow you to upload more files. This file can't be deleted.

At the Add FTP user page, you will find these forms:

Forms marked with a star (*) are required.

FTP Password is only required if creating a master account (marked with two stars (**)).

Remember to set the starting directory to '/' if you want to create a master account.

FTP Username: The name of the FTP user you'll create

FTP Password: The password of the FTP user you'll create

Your FTP password must follow these rules:

- Must be 8 characters or longer
- Must contain a number
- Must contain an alphabetic character

FTP Starting Directory: The directory you want the FTP user to be chrooted to (paths are relative, so if you want /path/to/users/directory/\$id/example you just type **/example**)

FTP Space: The maximum number of MB's (megabytes) the FTP user can upload

Click 'Go!' and the FTP user will be created. I created the FTP user 'phone' (it's for my phone).

LOGGING INTO YOUR NEWLY CREATED FTP ACCOUNT

Now we will go over how to use your newly created FTP account in different OS's and devices.

WINDOWS

You can use the built-in FTP client in explorer or use FileZilla.

Using the built-in FTP client:

WARNING: THE BUILT-IN FTP CLIENT IN WINDOWS USES INSECURE FTP. USING FILEZILLA IS RECOMMENDED

First, open 'My Computer', then do a right click in the empty white space, and click 'Add Network Location'.

This window will popup.



Click 'Next' then 'Next' again.

It will ask you for an address.

Type: ftp://lacicloud.net:21 (The LaciCloud FTP server is on port 21)

Click 'Next' and uncheck 'Log on anonymously' and then type your newly created FTP user's username.

Click 'Next' and type any name you like and click next again.

If your FTP user doesn't have a password, then a new window will open and you can start managing the FTP account like a folder. If It does have, a window will popup asking for the password of the FTP user:



Tick 'Save password' if you don't want to be asked again.

If you typed everything correctly this should open. Now you can manage your FTP account like a folder. Here you see me uploading some files to the server (account: phone).

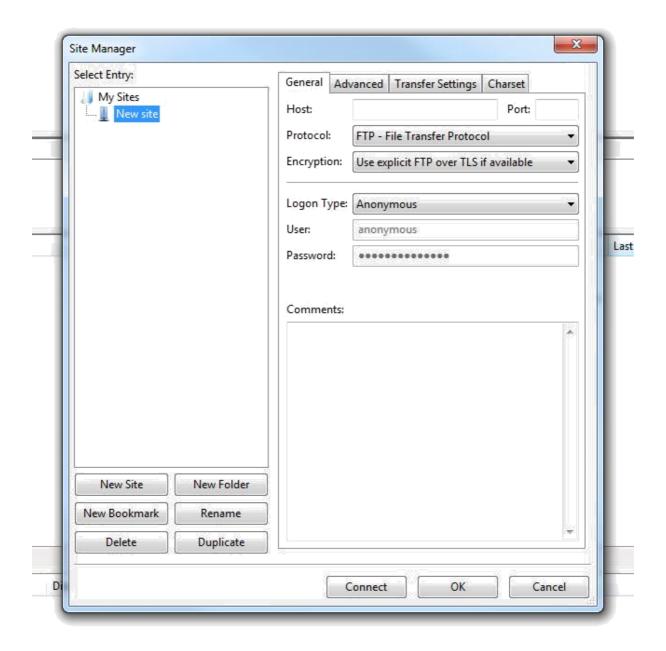


Using FileZilla:

Grab yourself a copy of FileZilla from https://filezilla-project.org/.

Install it. Then Launch.

In the top left corner, click 'File', then 'Site Manager'. And then 'New Site'.



For host type lacicloud.net and for port type 21.

Leave the protocol and encryption on default (Should be FTP/Use explicit FTP over TLS if available).

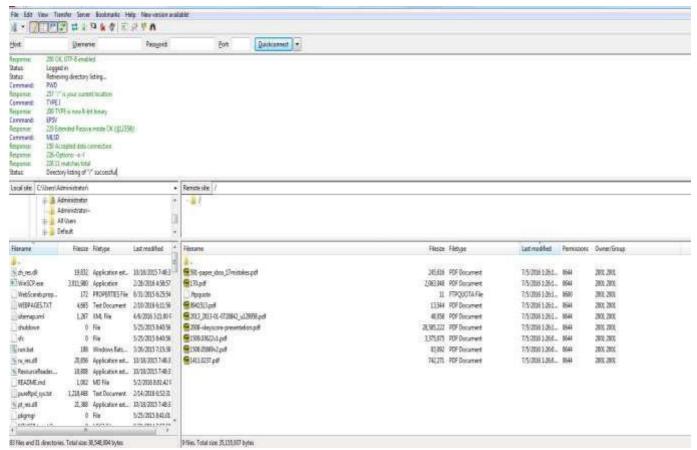
For logon type select normal or ask password (ask password is safer since it doesn't store the password in your computer), and then type in your username (in my case 'phone' and your password if normal otherwise when asked).

If you use a proxy server, go to the 'Advanced tab' and untick 'Bypass proxy', however this may not be needed.

Click 'Connect' if you want to connect now or 'Ok' if you want to connect later

Here I'm connected to the FTP server. To upload files, drag-and-drop into the folder, or select a file from the left-side folder and right-click, then click 'Upload'.

You can delete, **chmod (we'll go over chmodding later)**, rename files using a right-click. To move files already in the FTP server, select them and drag.



I will link a 3rd party video below.

Video (do note that in the first step he opens ,Map Network Drive' and then clicks on a shortcut to take him to 'Add Network Location' but we directly opened 'Add Network Location'): https://www.youtube.com/watch?v=UJ2O4SRxwkA

OSX

Since I have own no OSX device, there won't be any screenshots, but as before I'll link a 3rd party YouTube video below.

Using the built-in FTP client (INSECURE):

Click 'Go' on the top-bar on OSX. Click 'Connect to Server'. Enter the server address 'ftp://lacicloud.net:21'

Click 'Connect' and an authentication window will pop-up. Enter your newly created FTP user's username and password and click connect. You can also save this password to your keychain.

Click 'Connect' and if everything is correct a window will pop-up with the FTP account's content. It will be also automatically mounted in Finder.

Using FileZilla:

The same principle applies, download the FileZilla OSX binaries from the official FileZilla site and install.

Video: https://www.youtube.com/watch?v=Piv-RYI-iHI

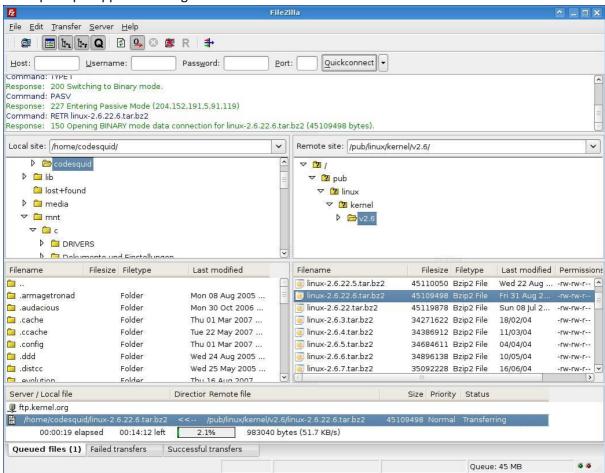
LINUX

Download and install FileZilla:

- From the command line:
 - o su or prefix sudo to every command (to become root)
 - o apt-get update
 - o apt-get install filezilla
 - on some distributions: add-apt-repository ppa:n-muench/programs-ppa (you may need to use 'ppa2') or add-apt-repository ppa:adabbas/1stppa
- From the GUI package manager
 - Open your package manager (ex: 'Ubuntu Software Center' for Ubuntu, 'Synaptic' for Linux Mint)
 - Search for FileZilla and install
- Downloading FileZilla precompiled binaries from the FileZilla website
 - o extract *.tar.bz2 file
 - o run 'filezilla' in the bin/ directory from the command line
- If all else fails, Compile from source
 - o make a 'filezilla' directory
 - type these commands at the command line
 - apt-get install subversion #get subversion
 - svn co https://svn.filezilla-project.org/svn/FileZilla3/trunk filezilla #get filezilla source
 - apt-get install libgnutls-dev #install libgnutls
 - apt-get install libidn2-0-dev #install libidn
 - apt-get install gettext #install gettext
 - apt-get install libdbus-c++-dev #install libdbus
 - apt-get install libwxgtk3.0-dev #install wxWidgets
 - apt-get install libperl-dev #install libperl-dev
 - apt-get install libtool #install libtool
 - apt-get install autoconf #install autoconf
 - apt-get install automake #install automake

- autoreconf -i #generate a configuration per system settings
- ./configure #configure the filezilla distro
- make #make filezilla
- make install #install filezilla

Same principle applies for usage of FileZilla.



3rd party video (method 1): https://www.youtube.com/watch?v=mzincT-Q6gs

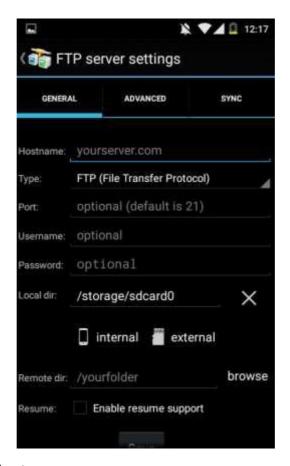
ANDROID

A multitude of FTP clients exists for Android, but here at LaciCloud we use AndFTP. AndFTP also supports syncing local folders to the remote FTP account.

To get started, download AndFTP from the Play Store or grab a copy of the apk file (just search for 'AndFTP apk' on Google).

Then, open the app. In the top bar, there is an add button (+ sign). Tap it.

You should see this screen.



For hostname, type lacicloud.net,

For type, select 'FTPS (Explicit FTP over TLS/SSL)',

For port, type 21,

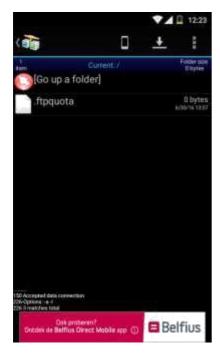
For username, type your newly created FTP account's username (in my case 'phone'),

For password, type your FTP account's password,

And finally tick 'Enable resume support'

Tap 'Save', and a new folder will appear on the main menu.

Tap the folder, and if everything was correctly entered, you should see a screen similar to this.



This means the connection was successful.

To start uploading files, click on the phone icon to switch to your phone's memory. Navigate into a folder (for example your photos are most commonly found in the 'DCIM' folder and then 'Camera').

After navigating to the camera folder you may notice the files are not in chronological order. To fix this tap on the 3 dots in the top right corner, tap on 'Sort' and tap on 'Sort by date'.

To select a file, tap once on it. You should see a green checkmark. To upload these files, tap on the upload sign next to the 3 dots (then tap 'Ok').

Now, to switch back to the FTP account, tap on the cloud icon next to the upload sign.

To manage files (either on the FTP account or the local files), select them (tap once), click the 3 dots and there you will see options such as 'Rename, Delete, Permissions (chmod)'. You can create a new folder with 'Create folder'.

To download, select the files you want and then tap the download sign.



Another great application is 'ES File Explorer', which supports FTP, along with some other protocols, but I only recommend you download it if you are also looking for a brilliant File Browser for Android, otherwise, just get AndFTP.

3rd party video: https://www.youtube.com/watch?v=5E9pUEg3Mzo

IOS

Download FTPManager for IOS and figure out how to use it.

Unfortunately, I don't have an IOS device and there aren't any videos available on the internet, so I can't help at the moment. The recommendation is based on the reviews.

---Ask for Vencel's IOS---

WINDOWS PHONE

Download 'mFTP2' from the store and figure out how to use it.

Unfortunately, again, I don't have a Windows Phone and there aren't any videos available on the internet, so I can't help at the moment. The recommendation is based on the reviews.

Please note that the app 'mFTP2' may only support unencrypted FTP, and thus is vulnerable to data sniffing.

Next time, buy an Android™

---Ask for Peters's WP---

DOS

As it is listed on the LaciCloud website, I feel obliged to make a tutorial for it.

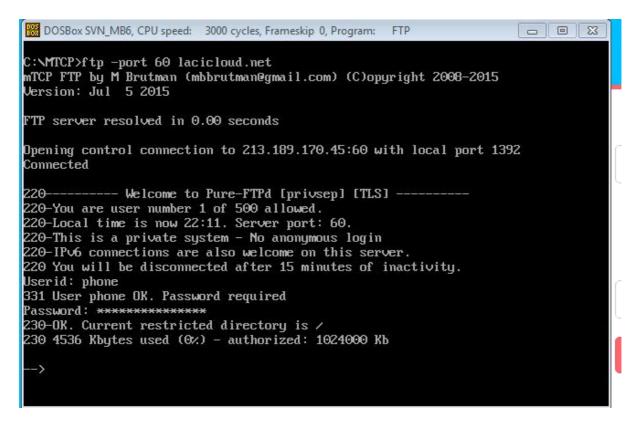
Grab yourself a copy of mTCP (http://www.brutman.com/mTCP/), extract the ZIP file, get it onto your DOS machine (for example via a floppy disk), setup networking (see the documentation here: http://www.brutman.com/mTCP/mTCP 2015-07-05.pdf) and at the command line type:

• ftp –port 21 lacicloud.net

You will be prompted for your FTP username and password. Make sure transfer mode is set to passive:

xfermode PASSIVE

Now you can start managing your FTP account.



Here you can see me logged in to the FTP server.

You can use the following commands to manage the account:

- dir/ls to list files
- cd change to a server directory
- mkdir/rmdir to make, remove a server directory
- rename rename a file on the server
- delete delete a file on the server
- get/put download a file from the server, upload a file to the server
- lcd/lmd change to a local directory, make a local directory
- mget/mput/mdelete download file matching pattern, upload file matching pattern, delete file matching pattern

```
DOSBox SVN_MB6, CPU speed: 3000 cycles, Frameskip 0, Program: FTP
                                                                      - 0 X
230 4639 Kbytes used (0%) - authorized: 1024000 Kb
 -> cd hello
250 OK. Current directory is /hello
--> put ftp.exe
227 Entering Passive Mode (213,189,170,45,47,89)
Socket for PASV connect will be 213.189.170.45:12121
150 Accepted data connection
106388 bytes sent in 3.740 seconds (27.797 KBytes/sec)
226-4743 Kbytes used (0%) - authorized: 1024000 Kb
226-File successfully transferred
226 3.738 seconds (measured here), 27.74 Kbytes per second
227 Entering Passive Mode (213,189,170,45,47,6)
Socket for PASV connect will be 213.189.170.45:12038
150 Accepted data connection
ftp.exe
226-Options: -a
226 3 matches total
```

Here you can see me changing to the directory /hello, uploading the file 'ftp.exe' and then checking the contents of the directory.

I managed to successfully the file 'ftp.exe' because I was in the directory the file was located at (C:\MTCP).

If I wanted to upload a file from C:\example, I'd have to first do 'lcd C:\example'.

Doing put C:\example\ftp.exe won't work.

Here is a slightly unrelated 3rd party video detailing how to setup networking and then a basic FTP server under a REAL MS-DOS machine: https://www.youtube.com/watch?v=CgATAo9WVHs

You can skip the setting up FTP server part and just use the client.

REMOVING AN FTP USER

To remove an FTP user, go to the 'User Manager' screen, and to the right of the name of the user you will see 'Remove', click on that, confirm it and your FTP user will be removed.



ADDING BITCOIN/ALTCOIN

But first,

WHAT IS BITCOIN?

'a type of digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.'

So Bitcoin provides you a secure and private way to transfer money.

For more information please read the Bitcoin Wiki: https://en.bitcoin.it

Altcoins are a different form of Bitcoins; only for advanced cryptocurrency users. We accept the following coins:

- Bitcoin
- <u>Litecoin</u>
- DogeCoin
- PotCoin
- DashCoin
- SpeedCoin
- And finally we accept Zcash, but since GoUrl, our payment processor doesn't support that, in order to pay via Zcash write an email to laci@lacicloud.net

To pay for a higher tier, simply navigate to https://lacicloud.net/shop, select your tier, and follow the instructions.

If you encounter any trouble, don't hesitate to send me an email to 'laci@lacicloud.net'.



In this chapter you will get to know the advanced features of LaciCloud.

CHMODDING & HIERCHICAL USER PERMISSIONS

CHMODDING

But first,

WHAT IS CHMODDING?

Linux-based system come with a permission management system, which allows for fine control over who may access your files and directories.

The command used for managing this permission management system is called 'chmod' (stands for 'change mode' – as in change the permission mode for the file or directory. That's where the name 'chmodding' comes from.

SO WHY IS THIS RELEVANT FOR LACICLOUD?

Well, for example, how can you make a directory read-only, to prevent accidental overwrites or deletions inside it?

Simple; just chmod!

So let's setup our scenario: Make an FTP user, log into the account using an FTP client like Filezilla, and create a directory that you want made read-only.

In this case, we need to chmod 500 it (owner can read/execute, others have no right) or chmod 544 it (owner can read/execute, others read only).

In Filezilla, right-click on the directory, and select 'File Permissions'. In the text box, type '500' or '544', and click 'Ok'.



Now, try deleting the folder, or the files inside and you'll notice you will get an 'Permission Denied' error. To change it back to read/write, simply chmod 755 the directory.

By default uploaded files are 644 (owner read/write, others read only), and folders are 755 (owner read/write, others read only).

The Linux permission management system is complicated, and I highly recommended you read a guide such as these: http://linuxcommand.org/lts0070.php and http://www.december.com/unix/ref/chmod.html

HIERCHICAL USER PERMISSIONS

You might be wondering, why is this a different section.

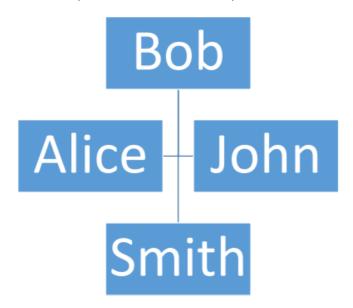
The truth is, that due to some technical aspects of the LaciCloud FTP server, chmodding can't solve everything.

For example, what do you do if you want a 'bob' user to access the files of user 'alice' and 'john', and you want 'alice' and 'john' to access the files of 'smith', but you don't want it to work in reverse.

To set this up, you'd need to create a 'bob' user with the directory /bob, 'alice' and 'john' with /bob/alicejohn, and 'smith' with /bob/alicejohn/smith.

Of course, the directories don't have to be their names.

This way 'bob' can see the files of 'alice' and 'john', and 'alice' and 'john' can see the files of 'smith', but it doesn't work in reverse (which is what we wanted).



And of course you have endless possibilities to use the hierarchical directory structure.

FTP BANNERS

Pure-FTPD – the FTP server used by LaciCloud contains a nice little feature which allows you to display messages when the user logs in, or when the user enters a directory.

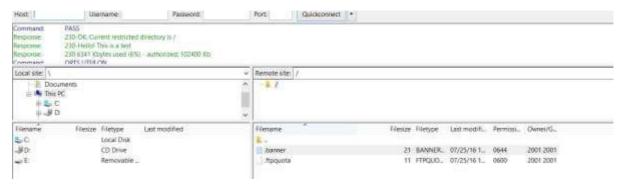
Let me quote the documentation:

'If a '.banner' file is located in the 'ftp' user home directory (or in the root directory of a virtual server, see below), it will be printed when the client logs in. Put a nice ASCII-art logo with your name in that file. This file shouldn't be larger than 4000 bytes, or it won't be displayed.

In each directory, you may also have a '.message' file. Its content will be printed when a client enters the directory. Such a file can contain important information ("Don't download version 1.7, it's broken!").'

In other words, make a .banner file in the FTP users home directory, and it will get displayed on FTP user login, or create a .message file In any directory inside the FTP users home directory, and It will get displayed on directory change.

Here you can see I have a .banner file with the contents 'Hello! This is a test'.



HTTP PUBLIC FILES

FTP is great. However most people don't know how to use FTP, or don't want to download an FTP client just to get your publicly shared pictures or software, or maybe you want to host static HTML files with CSS and JavaScript.

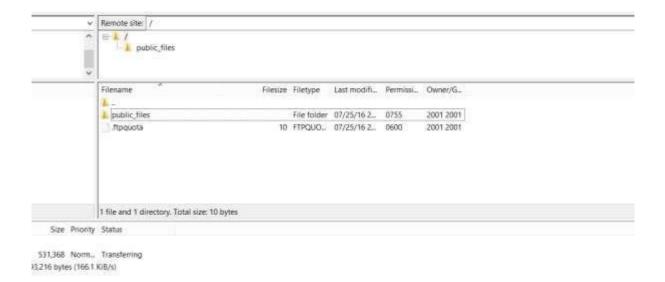
That is where the HTTP Public Files Feature comes into play.

The idea is simple:

In the /path/to/users/directory/\$id root directory, a folder called 'public_files' is created. By using a master account you can upload files and folders to this directory and they will be available at https://lacicloud.net/files/\$id over HTTPS, where \$id is your user id. The 8080 part is important (port number).

Let's try it: Create a master FTP account (remember: to do that set the starting directory to '/'), and find the public_files folder. Upload some files and check out the link https://lacicloud.net/files/\$id

Here you can see my master account, and the 'public_files' directory inside it.



So after uploading to the 'public_files' directory, if you go to <a href="https://lacicloud.net/files/\$id, you will see the uploaded files.



You can see I uploaded one of my favorite program – Putty, along with some HTML, CSS, and JavaScript files.

This can be used to host static HTML files with CSS and JavaScript. Simply upload the required files and the LaciCloud webserver will serve them. Here is an example (go to https://lacicloud.net/files/34/clock.html to see it live):



I used https://css-tricks.com/examples/CSS3Clock/ for the example.

Naming the file 'index.html' will prevent the directory listing and will make the browser automatically display that HTML file.

If you happen to accidentally delete the 'public_files' folder, you can simply re-create it to regain the ability to use the HTTP Public Files feature.

THOSE OTHER THREE FEATURES I LISTED

Just download the programs. You'll figure it out. ---Fill this out---



Miscellaneous information.

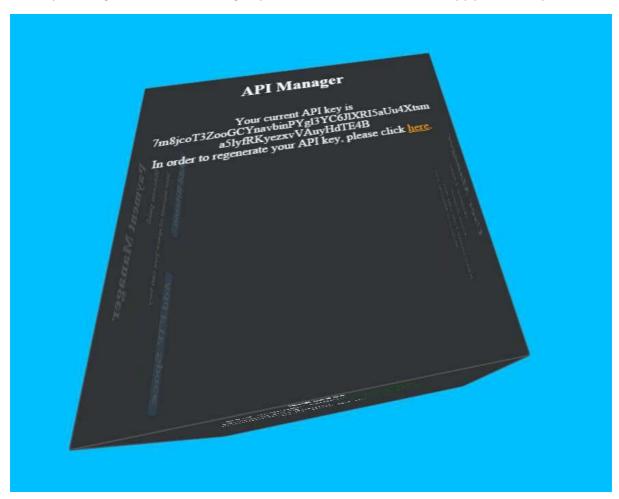
API

We have a developers API that you can integrate into your applications. It isn't some fancy REST API, but it gets the job done; It's a simple **full JSON-POST REST-less** API, which returns an JSON object containing the result of the API call.

The API is also used when managing your account from the normal interface.

The API is situated at https://lacicloud.net/api.

Let's try it. Navigate to the 'API Manager' part of the user interface, and copy your API key.



For more information including the list of available calls and, please check out our API documentation at https://lacicloud.net/resources/lacicloud api documentation.pdf.

FORGOTTEN PASSWORD

Have you forgotten your LaciCloud account password? Or maybe an FTP account password? Here is what you can do.

In the case of forgotten FTP password, it's simple. Since on deletion your files don't get removed, simply re-create that FTP user with the same starting directory.

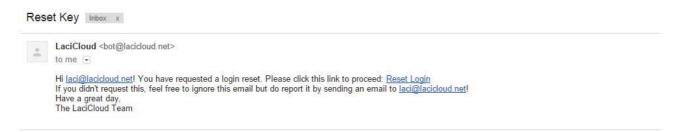
If you forgot your LaciCloud account password, navigate to the 'Forgot Login' page either by clicking 'Forgot Login?' on the login page, or by typing https://lacicloud.net/forgot in the URL bar.

This way, you can also change your password.

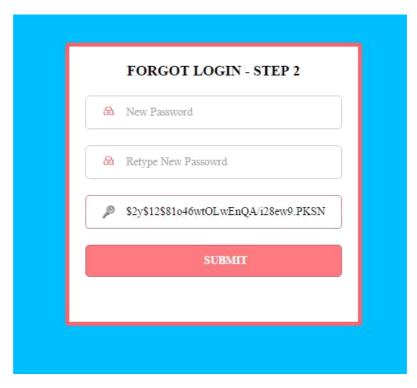
Type your email, fill in the Captcha, and click 'Submit'.



You should get an email.



Click the link and fill out the missing forms, then click 'Submit'.



Your new password can't be the same as your old password.

DELETED FTP FILES

Have you accidentally deleted a file uploaded to our server via FTP?

Send me an email at laci@lacicloud.net and I'll take a look at it.

Please include everything you remember about the file (name, extension, size)

IRC CHAT

We have an IRC channel at freenode.

Hostname: chat.freenode.net:6697 (non-SSL on port 6667 but that's insecure)

Channel: #lacicloud

My name: laci-lacicloud

The channel is invite only, so please send an email to laci@lacicloud.net with your user id, IRC name, from your registered email.

I recommend using the webchat for easy chatting: https://webchat.freenode.net

BUG BOUNTY

If you have found any bugs, either security or just normal functional bugs, send an email to laci@lacicloud.net and we'll sort it out.

For more information including terms of the bug bounty program please read: https://lacicloud.net/resources/lacicloud_legal.pdf

Finding bugs means free FTP space! Thanks

SUPPORT

For all help, questions, security bug bounty, please send an email to laci@lacicloud.net and I'll reply as soon as possible.

You can also contact us on Twitter, Facebook, or leave a message on Google+ or a comment on our YouTube channel.

I will also be on the IRC channel, so if you see me (laci-lacicloud) don't hesitate to ask me any questions.