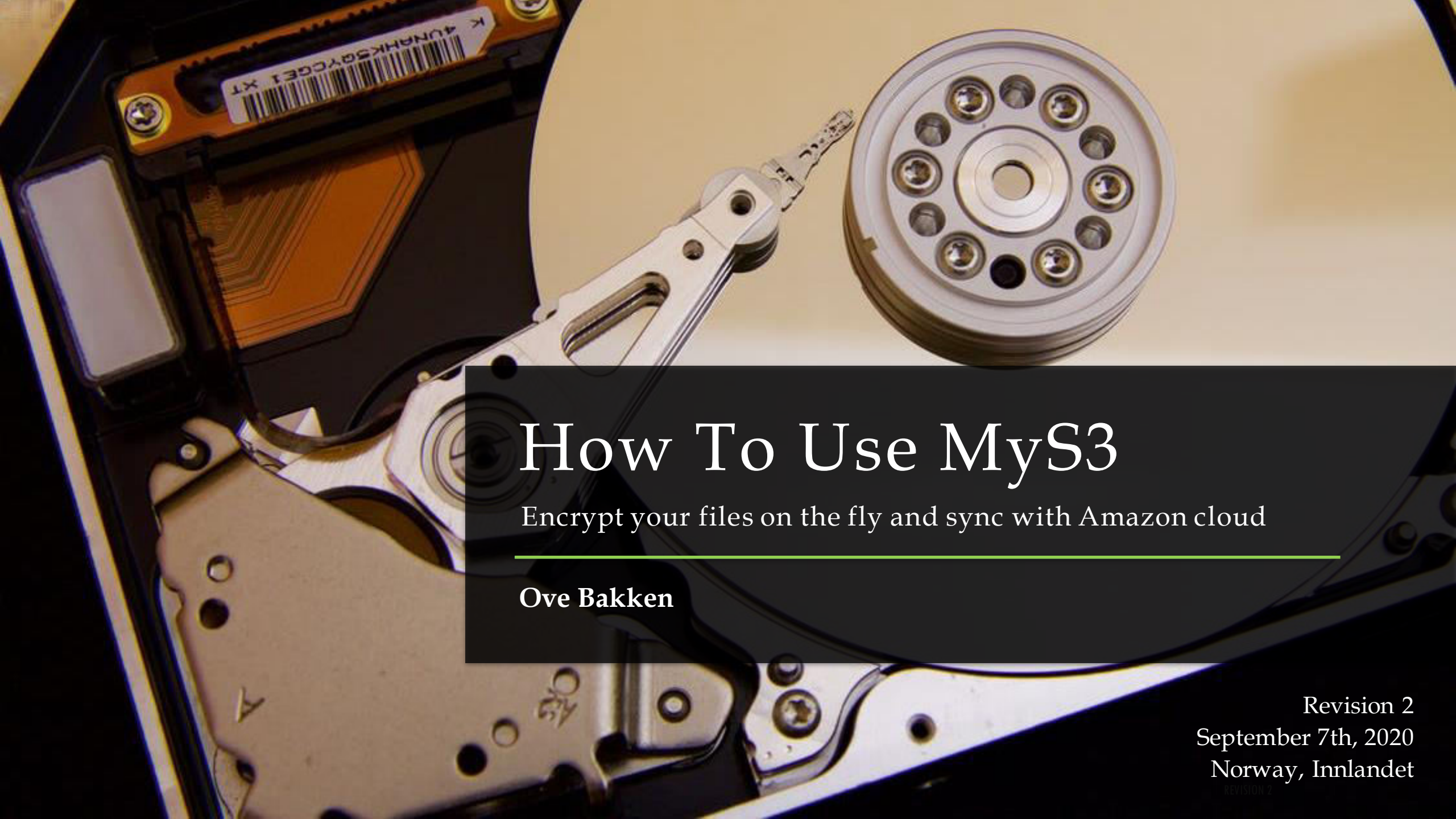

How To Use MyS3

Encrypt your files on the fly and sync with Amazon cloud

Ove Bakken

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Norway, Innlandet

Welcome!

How To Use MyS3

Ove Bakken

Since you're here you're probably curious about how you use MyS3.

This user manual has two parts: The Amazon cloud resource setup (1) and how to use MyS3 (2). MyS3 itself is very simple (and intuitive) and shouldn't require reading a manual. But if you feel unsure you're welcome to study it, and to send me questions.

MyS3 is simple software, but also fairly new. Please let me know if you experience any problems you believe to be bugs. If you're running Windows you can use the console client or the graphical interface client. However, Linux and Mac OS users can only run the console client for now.

All executables can be found at github.com/flaskevann/MyS3.

If you don't trust the uploaded builds, feel free to download the necessary GitHub projects yourself and make your own. After installing the needed NET Core tools all you have to do is run the build command.

Getting started

1) Do you have an Amazon Web Services (AWS) account? If not, you need to create one:
aws.amazon.com/premiumsupport/knowledge-center/create-and-activate-aws-account/

.. and then afterwards in this user guide:
2) You setup your own resources in the Amazon cloud

Meaning you create your own space with Simple Storage Service (S3), and then you give yourself access with access credentials from Access Management (IAM). Everything can be done directly using AWS Management Console. It's very easy if you follow the instructions.

Don't worry too much about the expenses. S3 is very price competitive. You have to upload or download a good amount before even breaking $1. Please see AWS S3 pricing for details:
aws.amazon.com/s3/pricing/

The rest of this user guide will assume you have access to AWS.

Setup S3 Bucket

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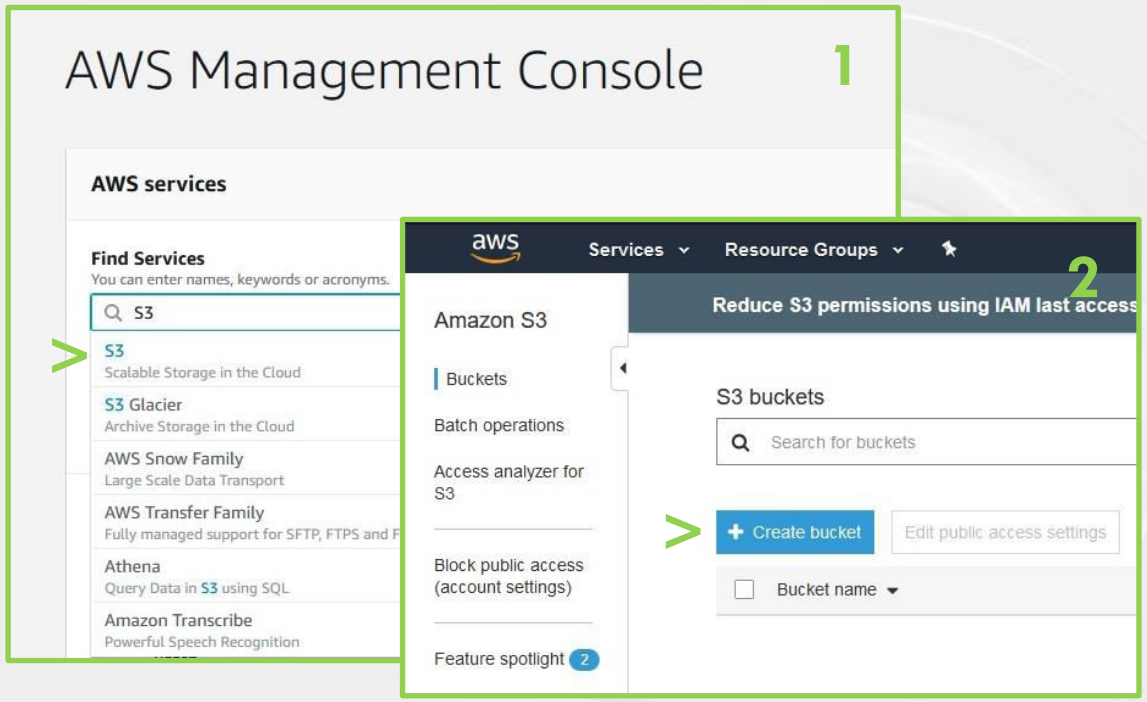
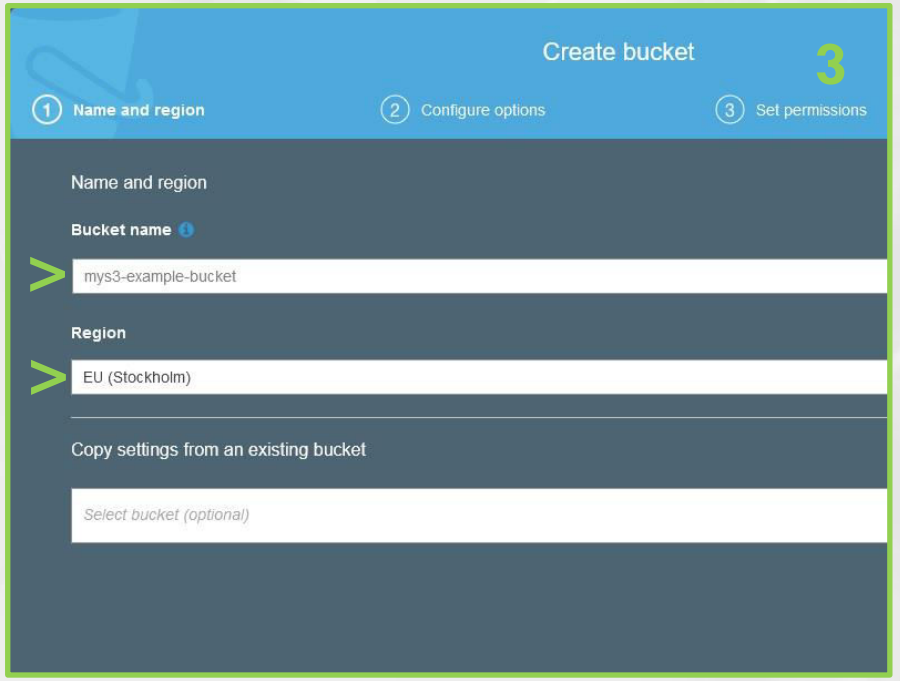
First things first, you need to setup your own S3 space. (AWS calls this a 'bucket'.)

You log onto AWS Management Console (1), select S3 (2), and find a bucket name (3):

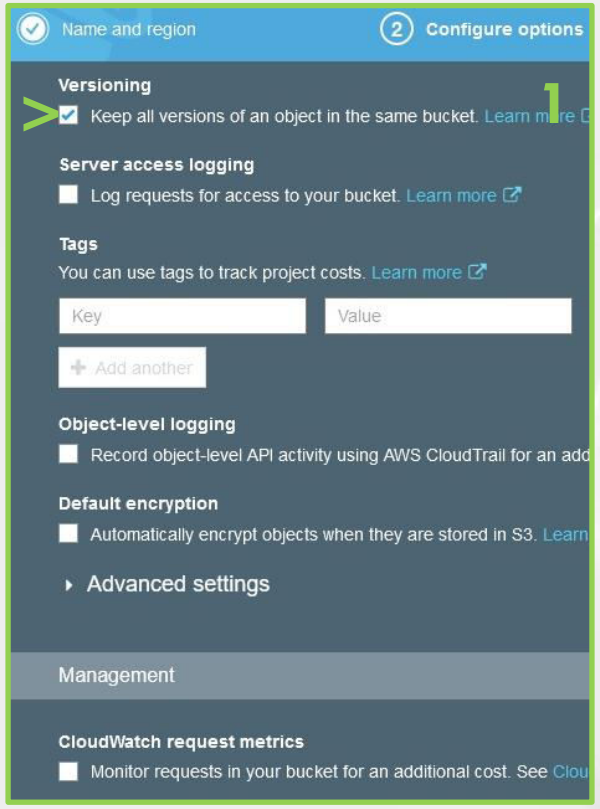


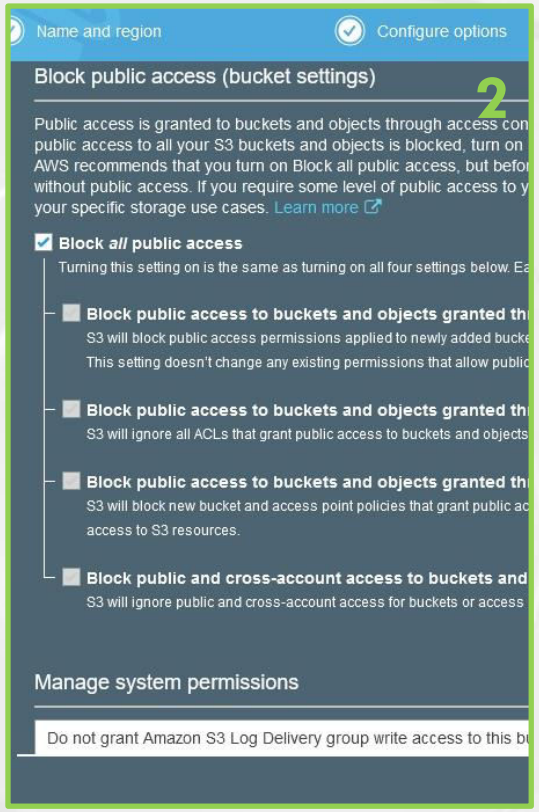


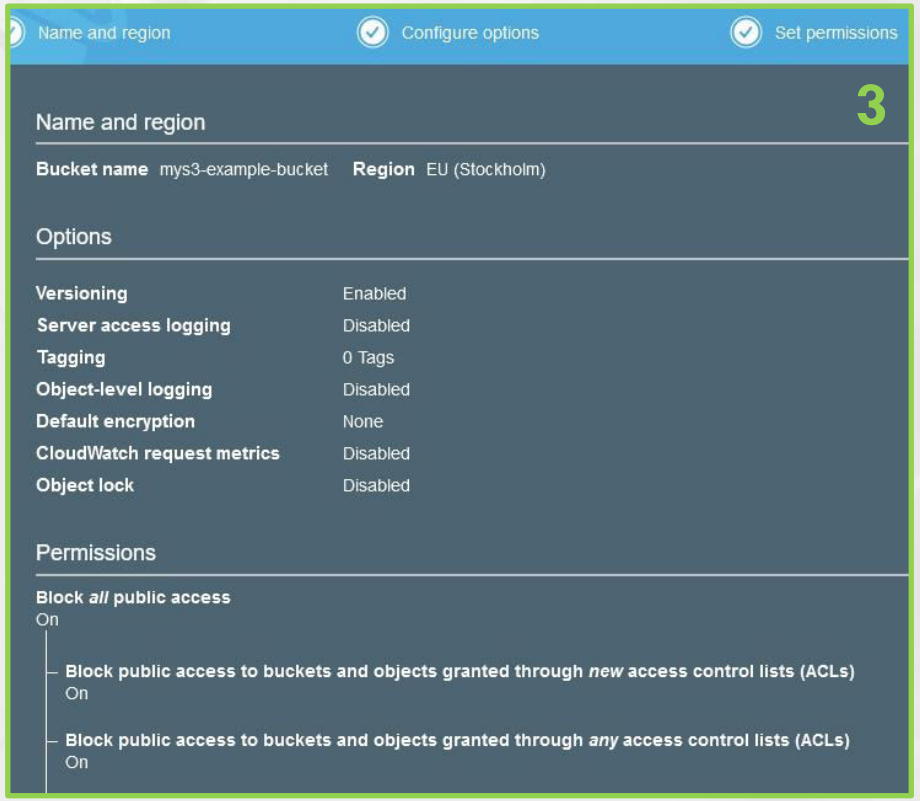
Region: Select closest or cheapest!

Setup S3 Bucket

Continue the setup. Do enable versioning (1), but use default settings for the rest:

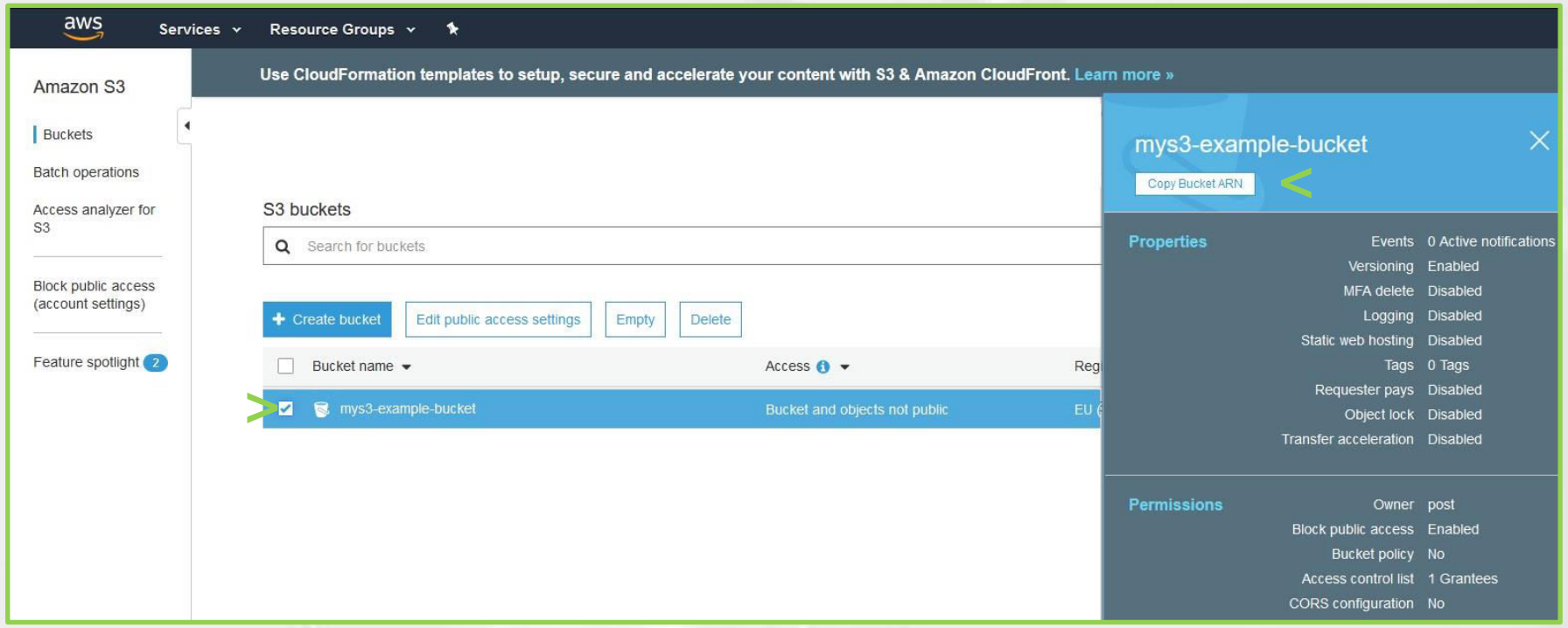






Get S3 Bucket ARN

After you've created your bucket (Yey!), copy bucket address (ARN) to a text document:

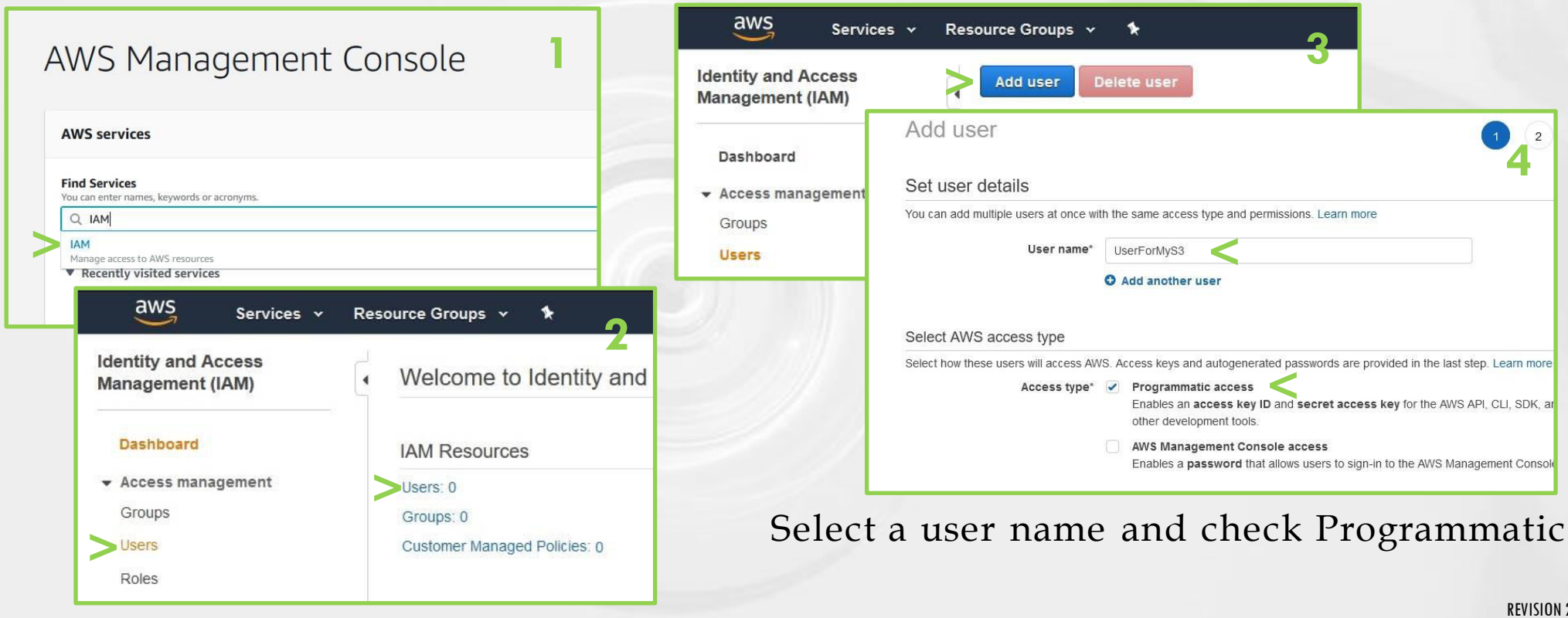


(Bucket ARN is needed when setting up your access credentials next!)

Setup IAM User

Now that you have your S3 bucket ready, you need a sort of user profile MyS3 can assume:

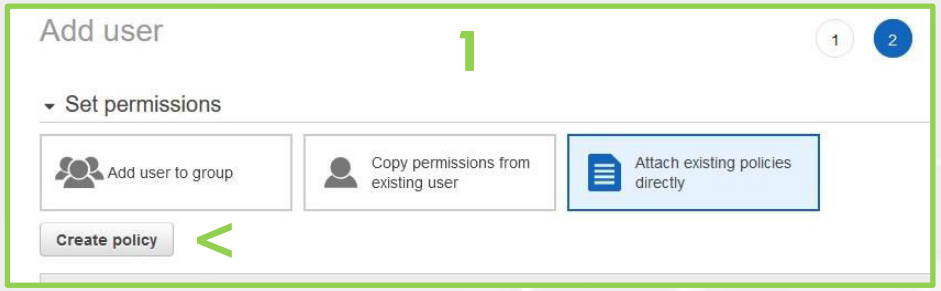
Go to AWS Management Console. Select IAM (1), Users (2), Add user (3) and start setup (4):



Select a user name and check Programmatic access.

Setup IAM Policy

Click create policy (1), this opens a new browser tab. Go to JSON (2) and put in text (3):



3

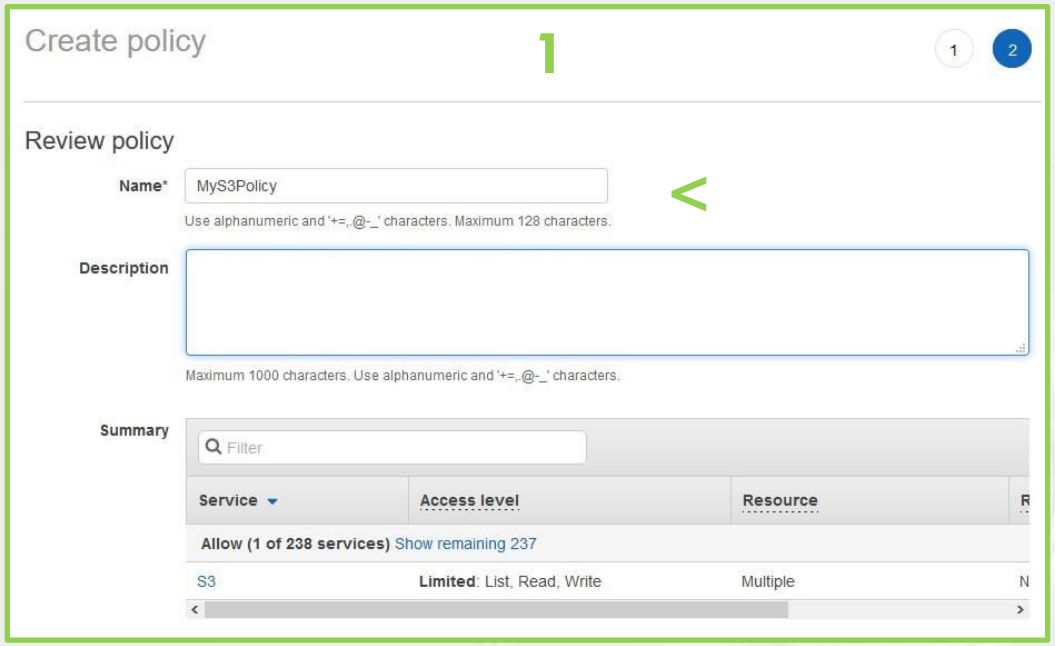
```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Effect": "Allow",
            "Action": [
                "s3:PutObject",
                "s3:GetObject",
                "s3:AbortMultipartUpload",
                "s3:DeleteObjectVersion",
                "s3:ListBucketVersions",
                "s3:ListBucket",
                "s3:GetBucketVersioning",
                "s3:DeleteObject",
                "s3:PutBucketVersioning",
                "s3:GetObjectVersion"
            ],
            "Resource": [
                "arn:aws:s3:::mys3-example-bucket",
                "arn:aws:s3:::mys3-example-bucket/*"
            ]
        }
    ]
}
```

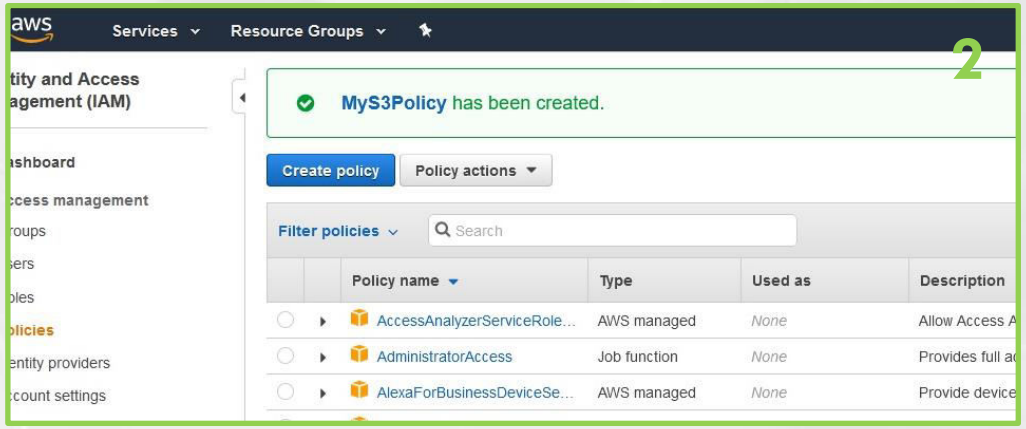
Put in your own bucket ARN twice at bottom.

Don't delete /*

Setup IAM Policy

Give your policy a fitting name (1) and finish it. IAM should then say it's created (2).



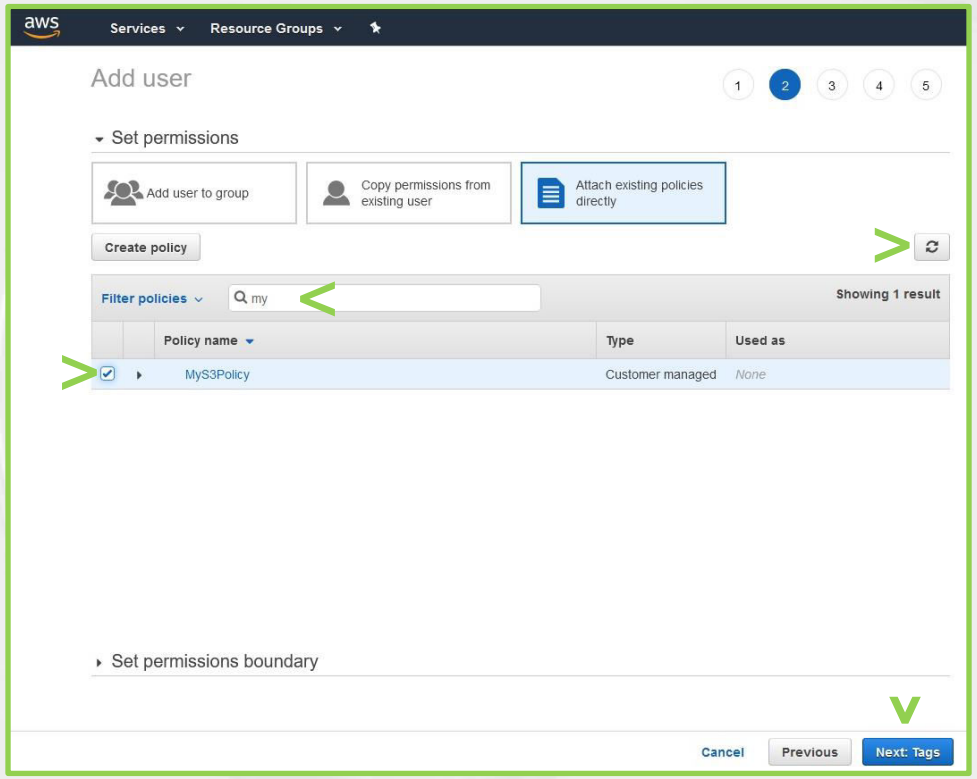


(The policy giving access to your S3 bucket now exists, and only has to be added to MyS3's user.)

Setup IAM User

Go back to the browser tab where you began setting up your user and refresh the list.

Find your newly created policy by typing the first few letters, then check it and hit next:



Setup IAM User

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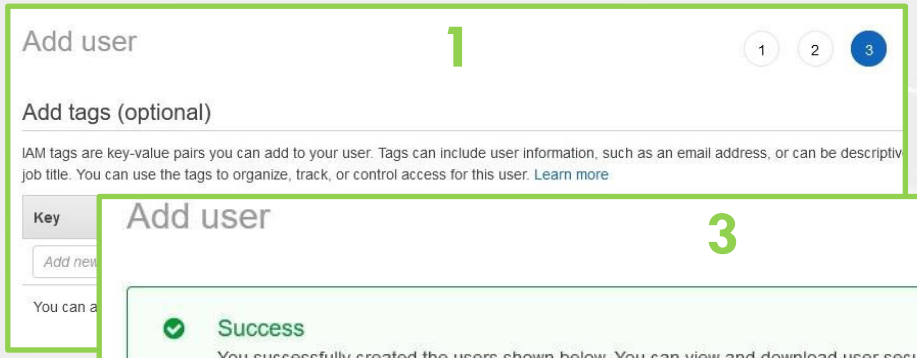
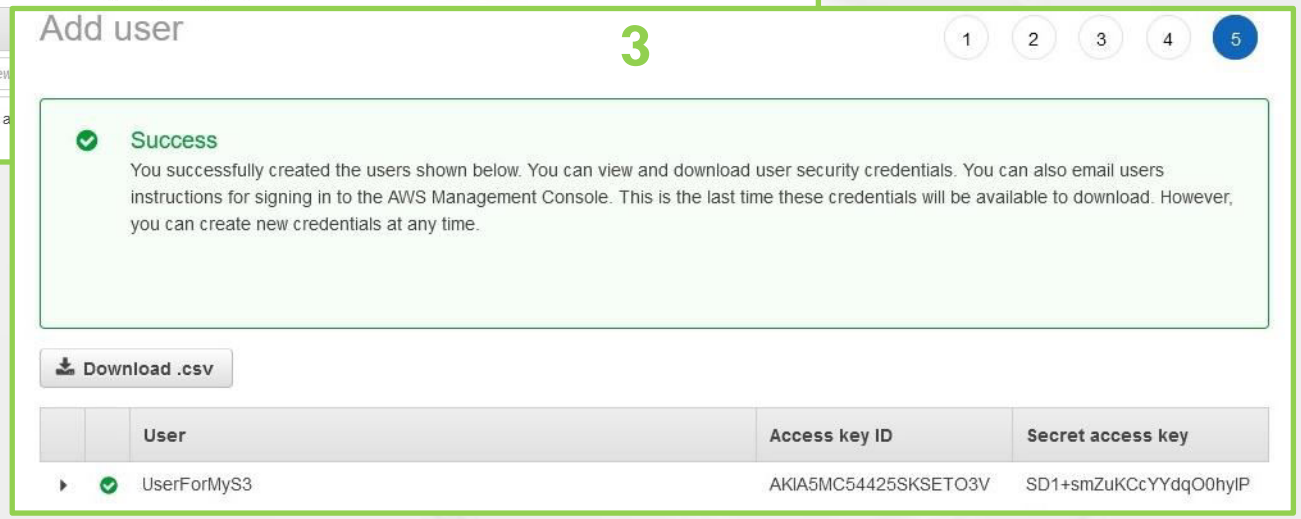
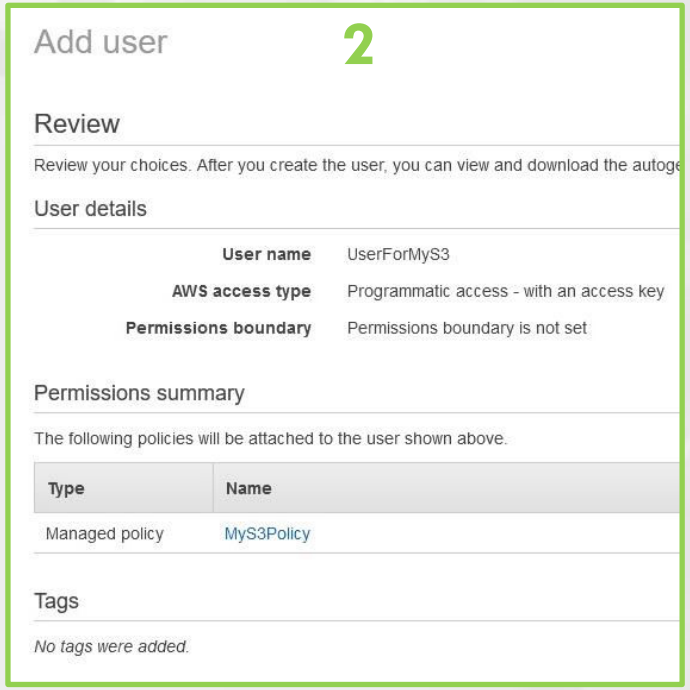
The next step is tags (1). Please skip this. Then comes a review (2) and finally the credentials screen (3) which gives you your access credentials:







Please download csv-file and keep it safe. (It gives access to your S3 bucket!)

The MyS3 Clients

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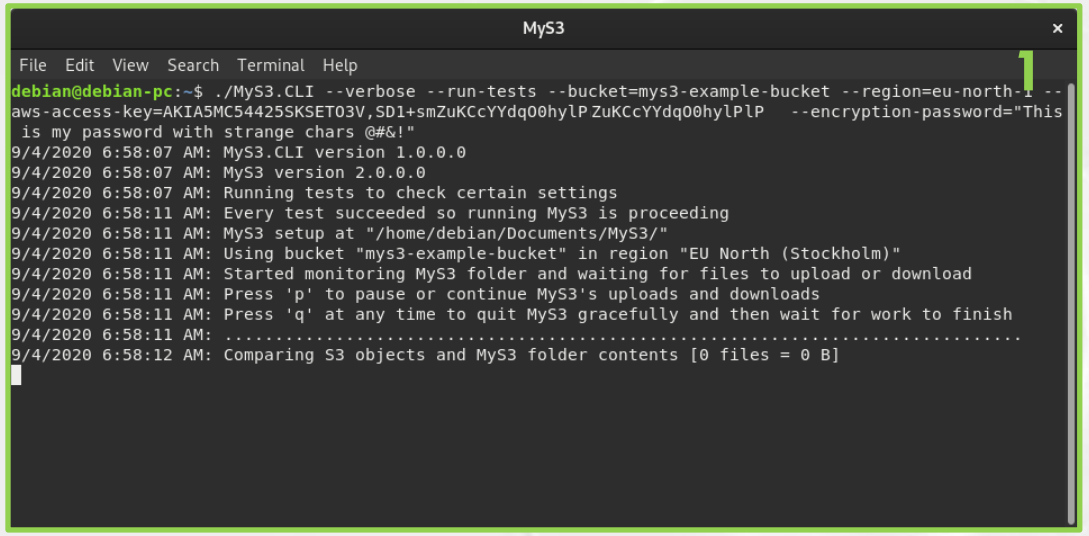
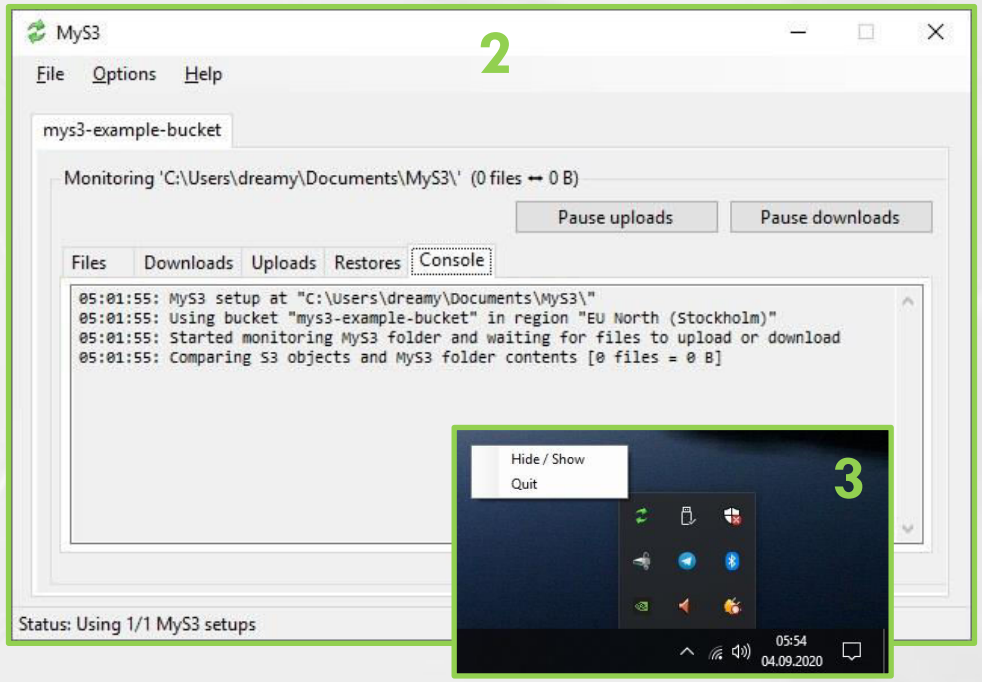
With your own S3 bucket and access credentials you can now setup MyS3 and start uploading whatever you want, without being surveilled.

How it looks when you get the console client (1) or GUI client (2-3), and you run your setup:

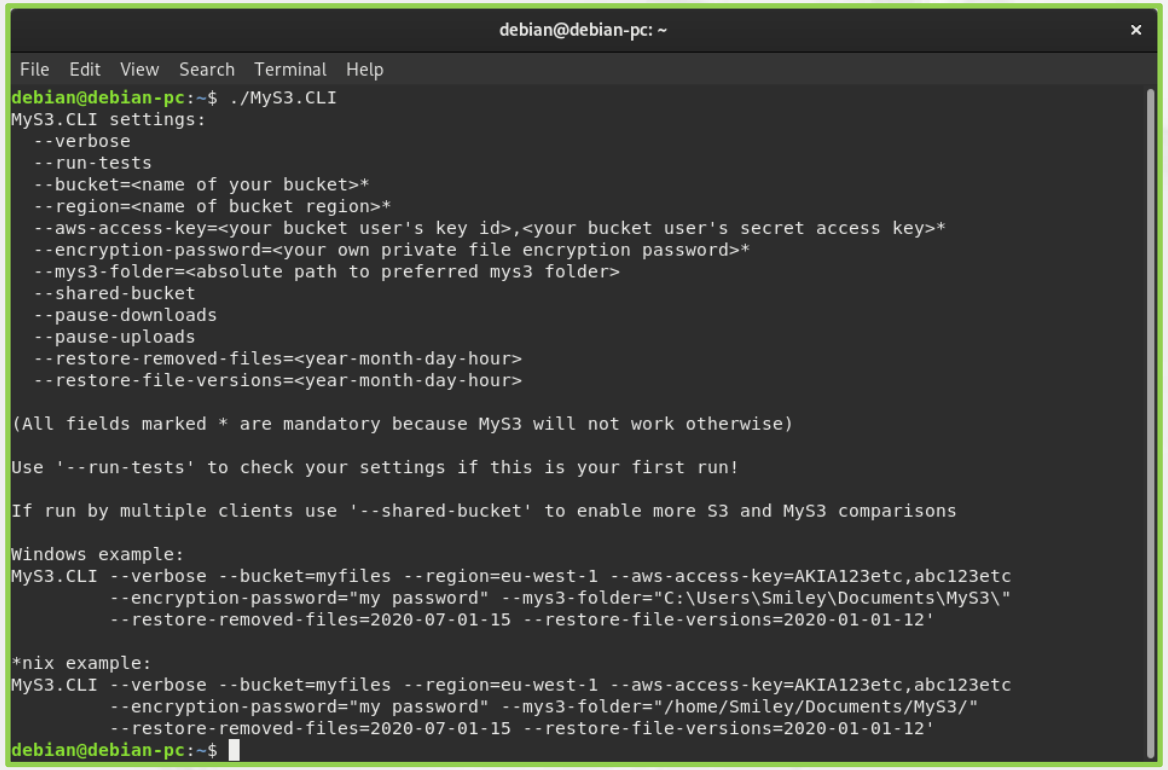




(A working console client setup can of course be put into a script file later for convenience.)

Console Client

Use of the console client is straightforward; just type in the necessary settings:



Don’t be afraid to make a mistake. MyS3 will tell you if there's a problem.

Graphical Interface Client Setup

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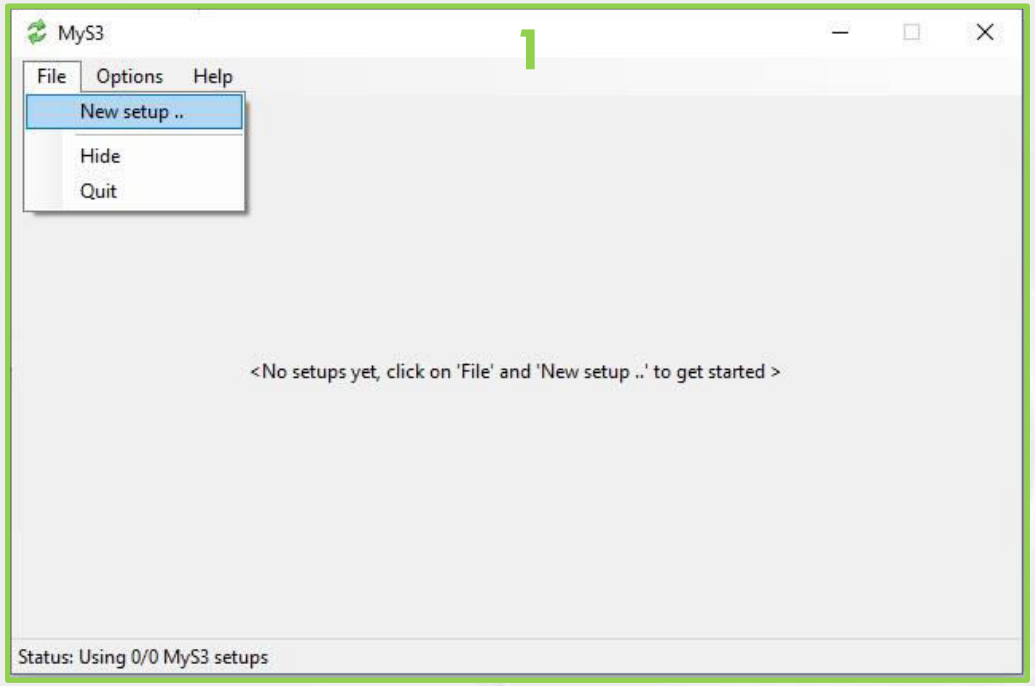
When you run the graphical interface client (1) you get a lot of help with your setup (2):



(Tip: Copy and paste in all your settings for greater speed and accuracy!)

Graphical Interface Client Sync

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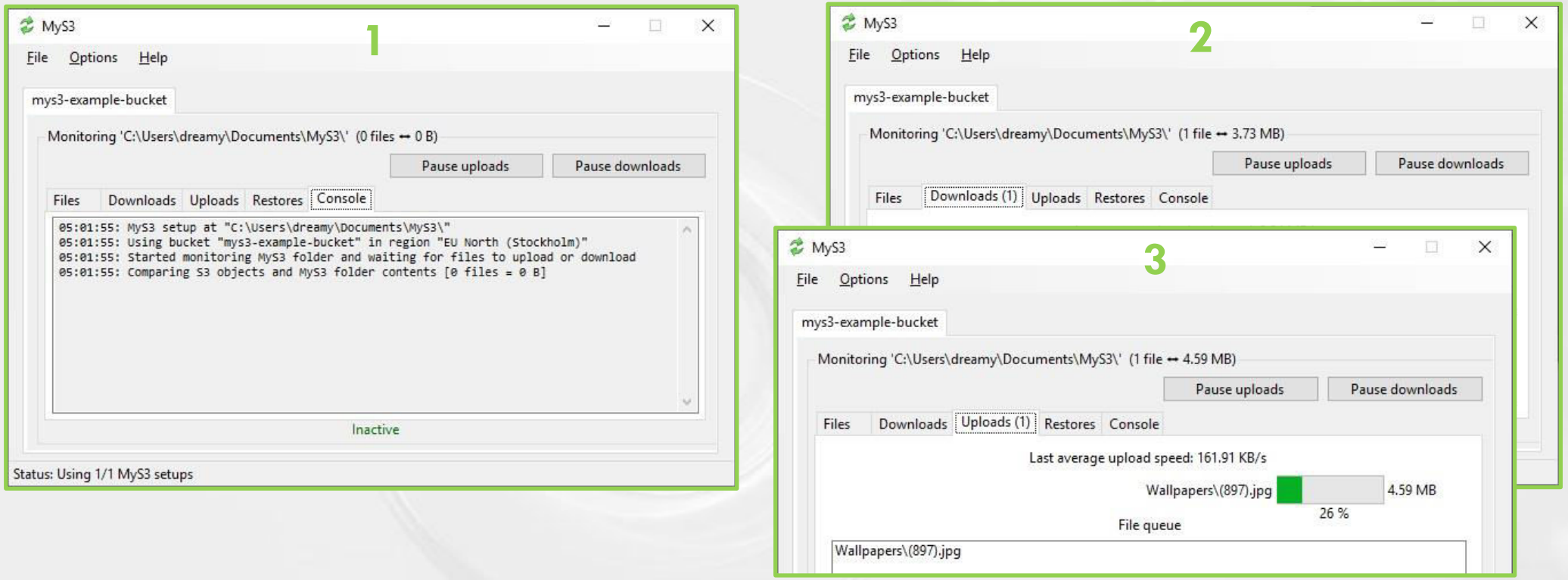
When MyS3 runs a setup it starts looking for new S3 bucket objects *and* it starts monitoring file activity (1). Then it does the necessary work (2-3) when something finally happens:



Graphical Interface Client Restore

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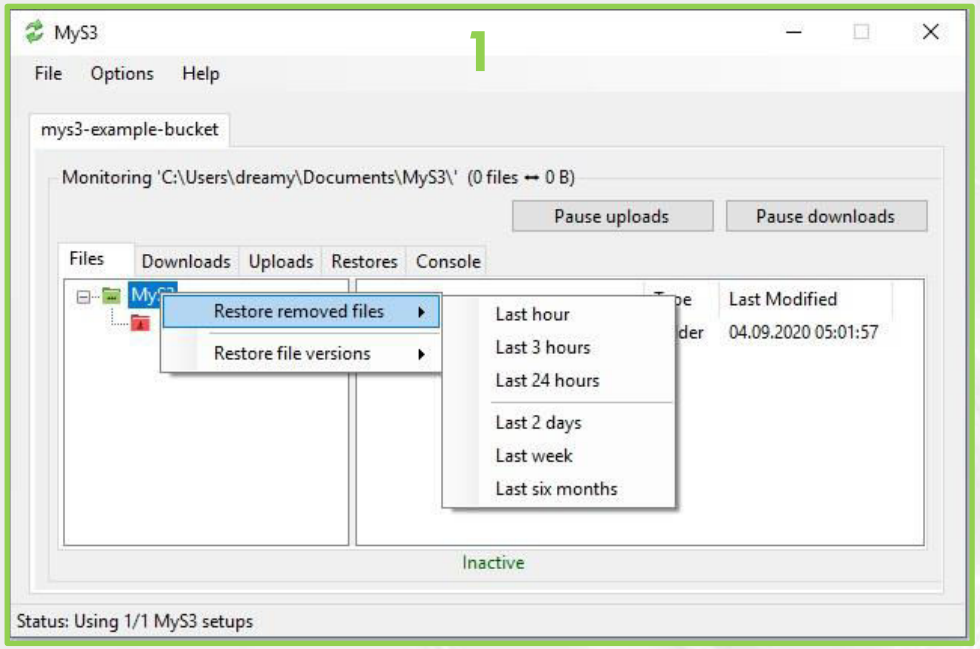
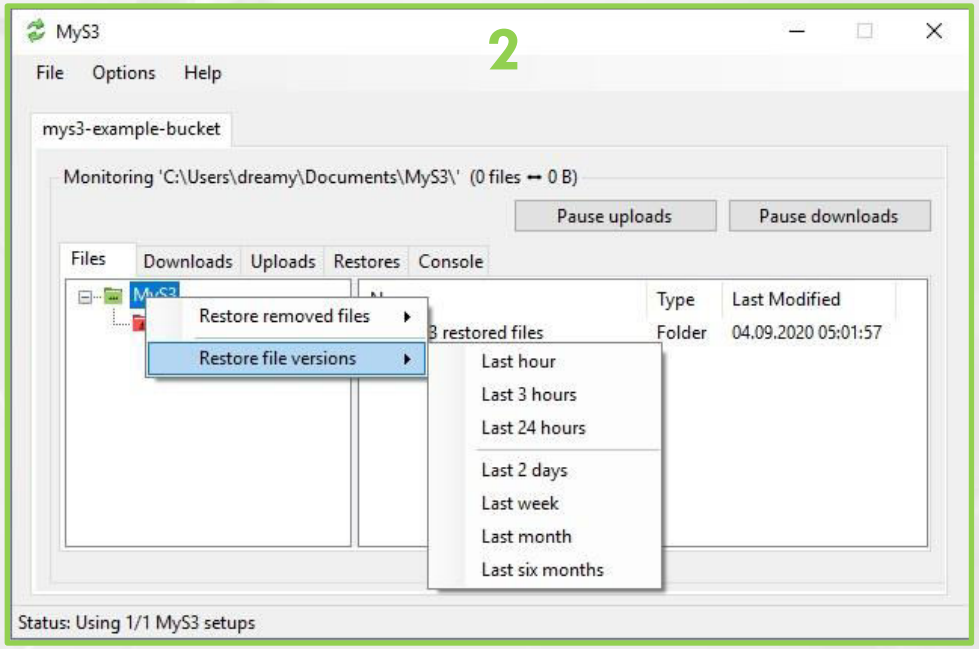
To restore last removed files (1) or earlier file versions (2), right click on the root in the Files tab:



(Removed files gets added back to the same folder they were removed from.)



(Earlier file versions also gets added back, but root becomes the MyS3 restored files folder.)

Missing Features

File Sharing: Since MyS3 encrypts all files and file paths *before* upload, sharing file links is not possible. However, you can always create another bucket and share it with somebody you trust. Because MyS3 is able to run multiple setups at the same time.

Password Recovery: MyS3 is not a file hosting service like Dropbox, etc. Meaning you have nowhere to turn if you lose your file encryption password. ***Which is why you should write it down and keep it in a safe place!*** You can also not change your encryption password whenever you feel like it, because all your files and file paths have already been encrypted with the current password and then uploaded.

To set a new file encryption password: 1) Remove your setup from your MyS3 client and quit the client. 2) Log onto the AWS Management Console and empty your entire S3 bucket. 3) Restart your MyS3 client and add back your setup with the new file encryption password, and click OK. 4) Wait for MyS3 to sync your files all over again, this is everything in your MyS3 folder.

A Few Gotchas

MyS3 only compares last changed timestamps when deciding if a file needs to be uploaded, or an S3 object downloaded. This is a problem if you still have copies of old files (perhaps in your computer's memory), that you accidentally save. MyS3 will then overwrite your newest S3 file content with the old. If this happens you have to use MyS3's function for restoring earlier file versions. Then you check each file version to find the correct one. You rename it and put it back where it belongs.

It's also best to let MyS3 run all the time you make changes to the content in your MyS3 folder. Particularly if you are sharing your S3 bucket. You can easily hide MyS3's main window. MyS3 will still run in the background.

** "Client-side encryption is the cryptographic technique of encrypting data on the sender's side, before it is transmitted to a server such as a cloud storage service."*

-https://en.wikipedia.org/wiki/Client-side_encryption

Thank You

I appreciate your interest and welcome questions and feedback!

post(a)ovebakken.no