## Requirements

* AWS IAM user with permission to read and write to destination bucket.
* AWS CLI installed and configured on on-prem server.
* S3 bucket where the files will go.
* Admin access to the REDCap environment

## Process

A user with admin privileges and AWS Access Keys should perform these steps.

1. Create S3 bucket.
2. Create service account IAM user.
   1. Set S3 access permissions.
   2. Create and download access keys.
3. Install AWS CLI on the on-prem server.
   1. Use admin access keys to configure the CLI.
4. Edit REDCap File repository config settings to us AWS S3

## Create S3 Bucket

Navigate to S3 and click **Create Bucket.** Name the bucket something globally unique and **keep all the defaults.**

## Create a service account IAM user

Follow the guides in order.

* [Create an IAM user](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_users_create.html)
* [Create IAM Access keys](https://docs.aws.amazon.com/IAM/latest/UserGuide/id_credentials_access-keys.html)
* Create IAM [inline policy](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_manage-attach-detach.html) and use the following:

**--------------------------------------------------------------------------**

**{**

**"Version": "2012-10-17",**

**"Statement": [**

**{**

**"Effect": "Allow",**

**"Action": [**

**"s3:\*",**

**"s3-object-lambda:\*"**

**],**

**"Resource": [**

**"arn:aws:s3:::yourbucketname”**

**]**

**}**

**]**

**}**

--------------------------------------------------------------------------

## Install AWS CLI and migrate data using S3 cp

* Install AWS CLI on the on-prem server.
  + [AWS CLI install](https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html)
  + [Configure the CLI](https://docs.aws.amazon.com/cli/latest/userguide/cli-chap-configure.html)
  + [AWS s3 cp usage](https://awscli.amazonaws.com/v2/documentation/api/latest/reference/s3/index.html)
    - **DO NOT** migrate data into a folder on S3. Only migrate data into the **root of the bucket**
  + Check the S3 bucket to see of the objects have migrated.

## Configure REDCap to use AWS S3 as a source

* Go to REDCap
  + Control Center > File Upload Settings
    - Change Storage location to Amazon S3
    - Enter in the Access Key credentials that you generated for the IAM service account.
  + Find a test project with a file upload field and try to download it.
    - If the download is unsuccessful
      * Check the policy in IAM.
      * Verify that the access key credentials you are using are correct and belong to the service account IAM user you created.