**. Set Up an S3 Bucket**

1. **Create an S3 Bucket**
   * Go to AWS S3 Console → Click **Create bucket**
   * Name the bucket (e.g., my-ubuntu-repo)
   * Disable **Block all public access** (you’ll use IAM policies instead)
   * Enable **Bucket Versioning** (optional, but useful for rollback)
2. **Set Bucket Permissions**
   * Go to **Bucket Policy** and add:

json

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{

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

"Statement": [

{

"Effect": "Allow",

"Principal": "\*",

"Action": "s3:GetObject",

"Resource": "arn:aws:s3:::my-ubuntu-repo/\*"

}

]

}

* + This makes the repository public. If you need a private repo, use IAM roles instead.

**2. Launch an EC2 Instance & Install Required Tools**

1. **Create an Ubuntu EC2 Instance**
   * Choose Ubuntu (e.g., Ubuntu 22.04 LTS)
   * Attach an IAM role with S3 read/write access (if using a private bucket)
2. **Install Required Packages**  
   Connect to the EC2 instance and run:

bash

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sudo apt update && sudo apt install -y dpkg-dev awscli

**3. Sync Debian Packages to the EC2 Instance**

1. **Create a Directory for the Repository**

bash

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sudo mkdir -p /var/www/html/ubuntu-repo

cd /var/www/html/ubuntu-repo

1. **Download Debian Packages**

bash

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wget http://archive.ubuntu.com/ubuntu/pool/main/a/apt/apt\_2.4.7\_amd64.deb

wget http://archive.ubuntu.com/ubuntu/pool/main/b/bash/bash\_5.1-2ubuntu2\_amd64.deb

1. **Generate the Package Index**

bash

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dpkg-scanpackages . /dev/null | gzip -9c > Packages.gz

1. **Upload to S3**

bash

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aws s3 sync /var/www/html/ubuntu-repo s3://my-ubuntu-repo --acl public-read

**4. Configure Ubuntu Clients to Use the Repository**

1. **Create a New Repository File**  
   On any Ubuntu machine that needs the repo, run:

bash

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echo "deb [trusted=yes] http://my-ubuntu-repo.s3.amazonaws.com/ ./" | sudo tee /etc/apt/sources.list.d/custom-repo.list

1. **Update APT and Install Packages**

bash

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sudo apt update

sudo apt install apt