# Hard Drive Cloning

This playbook outlines the step-by-step process required to clone a hard drive for the purpose of data transfer or operating system migration to a new drive.

### Step 1: Preparation

Ensure that the new hard drive is connected to your computer either internally via a SATA cable or externally through a USB-to-SATA adapter. Make sure it has enough capacity to receive all the data from your source drive.

### Step 2: Cloning Software

Select and install reliable hard drive cloning software on your computer. Options include Clonezilla, Acronis True Image, and Macrium Reflect among others.

### Step 3: Data Backup

Backup any important data from the source and destination drives to an alternative storage device to prevent data loss in case of errors during the cloning process.

### Step 4: Initiate Cloning

Open the cloning software and select the source drive (the drive you want to clone) and the destination drive (the new hard drive). Carefully follow the software prompts to start the cloning process.

### Step 5: Cloning Process

Monitor the cloning process. This may take a considerable amount of time depending on the size of the drive and amount of data being transferred.

### Step 6: Finalization

Once the cloning is complete, shut down the computer and, if necessary, swap the drives if you're replacing the old drive with the new one.

### Step 7: Boot Verification

Turn on the computer and verify that it boots correctly from the new drive. Check that all data has been accurately cloned and is accessible.

## General Notes

### Software Choice

Choose cloning software that supports your computer's operating system and file system format.

### Drive Health

Prior to cloning, it's advisable to check the health of both the source and destination drives using disk utility software to avoid data errors.

### Sector-by-Sector

Some cloning software offers a sector-by-sector cloning option that replicates every sector of the drive, useful for recovering hidden partitions or when exact duplication is needed.