Azure File Sharing allows you to create a fully managed file share in the cloud that can be accessed via the SMB protocol. This service is integrated into Azure Storage accounts. Here's a step-by-step guide to set up and use Azure File Sharing within a storage account using the Azure Portal:

**Step 1: Create a Storage Account**

1. **Sign in to Azure Portal**: Go to [Azure Portal](https://portal.azure.com/) and sign in with your credentials.
2. **Create a Storage Account**:
   * Navigate to the **Storage accounts** service.
   * Click on **+ Create**.
   * Fill in the necessary details such as **Subscription**, **Resource Group**, **Storage Account Name**, **Region**, and **Performance**.
   * In the **Replication** section, choose the desired replication type (LRS, GRS, etc.).
   * Click **Review + create** and then **Create** after validation.

**Step 2: Create a File Share**

1. **Access the Storage Account**: Once the storage account is created, navigate to it.
2. **Create a File Share**:
   * In the storage account, go to **File shares** under **Data storage**.
   * Click on **+ File share**.
   * Provide a **Name** for the file share.
   * Specify a **Quota** (the maximum size of the file share in GB).
   * Click **Create**.

**Step 3: Upload Files to the File Share**

1. **Access the File Share**: Navigate to the file share you just created.
2. **Upload Files**:
   * Click on **+ Upload**.
   * Select the files you want to upload.
   * Click **Upload**.

**Step 4: Connect to the File Share**

**From a Windows Machine:**

1. **Get the Connection String**:
   * In the file share, click on **Connect**.
   * Select **Windows**.
   * Copy the **net use** command provided.
2. **Run the Command**:
   * Open **Command Prompt** or **PowerShell** on your Windows machine.
   * Paste and run the **net use** command to map the file share to a drive letter.

**From a Linux Machine:**

1. **Get the Connection String**:
   * In the file share, click on **Connect**.
   * Select **Linux**.
   * Copy the mount command provided.
2. **Install SMB Client**:
   * Ensure that the SMB client (cifs-utils on Ubuntu) is installed: sudo apt-get install cifs-utils.
3. **Run the Command**:
   * Open a terminal on your Linux machine.
   * Create a directory to mount the share: sudo mkdir /mnt/azure.
   * Run the mount command to mount the file share.

**From a macOS Machine:**

1. **Get the Connection String**:
   * In the file share, click on **Connect**.
   * Select **macOS**.
   * Copy the mount command provided.
2. **Run the Command**:
   * Open a terminal on your macOS machine.
   * Create a directory to mount the share: sudo mkdir /Volumes/azure.
   * Run the mount command to mount the file share.

**Step 5: Manage Access and Permissions**

1. **Azure AD Integration**:
   * Integrate your Azure file share with Azure Active Directory (Azure AD) for identity-based authentication.
2. **Access Control**:
   * Set permissions for users and groups to control access to the file share.
   * Use **Access Control (IAM)** to assign roles and manage permissions.

**Step 6: Configure File Share Backup (Optional)**

1. **Backup File Shares**:
   * Use Azure Backup to configure backups for your file shares.
   * Navigate to the **Recovery Services vaults** in the Azure portal.
   * Create a new vault or select an existing one.
   * In the vault, go to **Backup** > **+ Backup**.
   * Select **Azure File Share** as the workload.
   * Choose the storage account and file share to back up, then configure the backup policy.

**Summary**

Azure File Sharing within a storage account provides a robust, scalable solution for file sharing across different platforms and environments. By following these steps, you can easily set up, configure, and manage Azure File Shares via the Azure Portal, enabling seamless file sharing for your applications and users.