**Script: Azure Resource Tagging**

**Overview**

This PowerShell script automates the process of tagging Azure resources based on information provided in a CSV file. It reads the CSV file containing resource IDs along with tag key-value pairs, connects to the Azure account, and updates the tags for each specified resource.

**Prerequisites**

1. **Azure PowerShell Module**: Ensure that Azure PowerShell module is installed. You can install it using the following command:

```powershell

Install-Module -Name Az -AllowClobber -Scope CurrentUser

```

**Usage**

1. **CSV File Format**: Prepare a CSV file with the following format:

```csv

ResourceId

/subscriptions/your\_subscription\_id/resourceGroups/your\_resource\_group/providers/Microsoft.Compute/virtualMachines/your\_virtual\_machine

/subscriptions/your\_subscription\_id/resourceGroups/your\_resource\_group/providers/Microsoft.Storage/storageAccounts/your\_storage\_account

```

Replace placeholders with your actual Azure Resource ID.

2. **Run the Script**: Execute the PowerShell script using the following command:

```powershell

.\ update-TagAzureResources.ps1

```

Ensure that you replace `update-TagAzureResources.ps1` with the actual name of your script file.

3. **Check Log File**: After execution, check the log file (`update-TagAzureResources\_status.log`) for details about the tagging process.

**Script Details**

1. **Variables**:

- `$csvFilePath`: Path to the CSV file containing resource IDs and tag values.

- `$logFilePath`: Path to the log file where status messages will be recorded.

- `$statusMessages`: Array to store status messages during the tagging process.

2. **Main Logic**:

- The script reads the CSV file and iterates through each resource specified.

- For each resource:

- It extracts the subscription ID from the resource ID.

- Connects to Azure using `Connect-AzAccount`.

- Selects the Azure subscription specified in the resource ID.

- Retrieves the Azure resource by its ID using `Get-AzResource`.

- Removes any specified tag to be removed (`$tagKeyToRemove`) if present.

- Adds or updates the specified tag key-value pair for the resource.

- Records success or failure status messages accordingly.

3. **Error Handling**:

- The script handles errors gracefully using `try` and `catch` blocks.

- Errors during the tagging process or CSV file reading are logged with detailed error messages.

**Output**

- The script logs the status of each tagging operation into a log file (`update-TagAzureResources\_status.log`).

- Upon completion, it displays a message indicating the completion of the tagging process.

**Note**

- Ensure that you have appropriate permissions and credentials to connect to the Azure account and modify resources.

- Review and customize the script according to your specific requirements and Azure environment.