OPERATING SYSTEMS AND YOU: BECOMING A POWER USER

Course 3: IT Support

Masego Mogale

Objective

The objective of this practical exercise was to demonstrate:

1. Creating multiple user accounts in Windows.

2. Assigning users to appropriate groups with permissions.

3. Managing file permissions for users and groups.

4. Installing a software package using the PowerShell (CLI) via Chocolatey.

This exercise emphasizes administrative skills in user and file management, and the ability to automate software installation on Windows systems.

1. Creating Multiple Users

Step 1: Open PowerShell as Administrator

- Press Win + S, type PowerShell, right-click Windows PowerShell, and select Run as Administrator.

Step 2: Create Users

Commands executed:

Explanation:

- net user → command to create or manage users.

- student1–student10 → usernames of new accounts.

- Password123! → temporary password for each user (replace with stronger passwords if required).

- /add → parameter that adds the new user to the system.

2. Assigning Groups

Step 1: Assign Administrative Privileges

- Adds student1 to the Administrators group to give full system access.

Step 2: Create a Custom Group

- Creates a group called Developers to manage permissions for multiple users.

Step 3: Add Users to Groups

- Adds users student2–student5 to the Developers group for specific access privileges.

```
The command completed successfully.
                    # Add student1 to Administrators
>> net localgroup Administrators student1 /add
>>
>> # Create Developers group (if not already existing)
>> net localgroup Developers /add
>>  command completed successfully.
>> # Add student2-5 to Developers
>> net localgroup Developers student2 /add
>> net localgroup Developers student3 /add
>> net localgroup Developers student4 /add
>> net localgroup Developers student5 /add
>> C:\WINDOWS\system32>
The command completed successfully.

The command completed successfully.

The command completed successfully.

The command completed successfully.

The command completed successfully.

The command completed successfully.

PS C:\WINDOWS\system32>
```

3. Managing File Permissions

Step 1: Create a Test File

```
PS C:\WINDOWS\system32> echo "This is a shared project file" > C:\project.txt
>>
PS C:\WINDOWS\system32>
```

Creates a file named project.txt at the root of C: drive containing sample text.

Step 2: Set File Permissions

```
PS C:\WINDOWS\system32> # 1. Create the file
>> echo "This is a shared project file" > C:\project.txt
>>
>> # 2. Remove inherited permissions (so only explicit ones apply)
>> icacls "C:\project.txt" /inheritance:r
>>
>> # 3. Grant student1 Modify (Read + Write + Execute + Delete)
>> icacls "C:\project.txt" /grant student1:M
>>
>> # 4. Grant Developers group Read-only
>> icacls "C:\project.txt" /grant Developers:R
>>
>> # 5. Verify permissions
>> icacls "C:\project.txt"
>>
processed file: C:\project.txt
Successfully processed 1 files; Failed processing 0 files
processed file: C:\project.txt
Successfully processed 1 files; Failed processing 0 files
processed file: C:\project.txt
Successfully processed 1 files; Failed processing 0 files
C:\project.txt DESKTOP-279TG12\Developers:(R)
               DESKTOP-279TG12\student1:(M)
               Mandatory Label\High Mandatory Level:(I)(NW)

Successfully processed 1 files; Failed processing 0 files
PS C:\WINDOWS\system32>
```

Explanation:

- icacls → manages file and folder permissions in Windows.
- (R,W) → read and write permissions.
- (R) → read-only permissions.
- /inheritance:r → removes inherited permissions for certain users.

4. Installing a Software Package via CLI

Step 1: Install VLC Media Player using Chocolatey

- Installs VLC Media Player using Chocolatey.
- -y → automatically confirms all prompts during installation.

Step 2: Verify Installation

Checks if VLC installed correctly and shows the version installed.

VLC media player

2025/08/27

Voice Recorder

16.0 KB