

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:

[illegible]

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.

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

```

PS C:\WINDOWS\system32> # Install VLC Media Player
>> choco install vlc -y
>>
>> # Verify installation
>> vlc --version
>>
Chocolatey v2.3.0
Installing the following packages:
vlc
By installing, you accept licenses for the packages.
Downloading package from source 'https://community.chocolatey.org/api/v2/'
Progress: Downloading vlc.install 3.0.21... 100%

vlc.install v3.0.21 [Approved]
vlc.install package files install completed. Performing other installation steps.
Installing 64-bit vlc.install...
vlc.install has been installed.
WARNING: No registry key found based on 'vlc.install'
WARNING: Can't find vlc.install install location
    vlc.install may be able to be automatically uninstalled.
    The install of vlc.install was successful.
    Deployed to 'C:\Program Files\VideoLAN\VLC'
Downloading package from source 'https://community.chocolatey.org/api/v2/'
Progress: Downloading vlc 3.0.21... 100%

vlc v3.0.21 [Approved]
vlc package files install completed. Performing other installation steps.
    The install of vlc was successful.
    Deployed to 'C:\ProgramData\chocolatey\lib\vlc'

Chocolatey installed 2/2 packages.
See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

```

- 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.


```

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\WINDOWS\system32> vlc --version
>>
PS C:\WINDOWS\system32>

```

 VLC media player version 3.0.21

Dumped content to vlc-help.txt file.
Press the RETURN key to continue...



VLC media player

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Voice Recorder

16.0 KB