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TOPIC - 1 : Interactive and Non-Interactive Applications Introduction

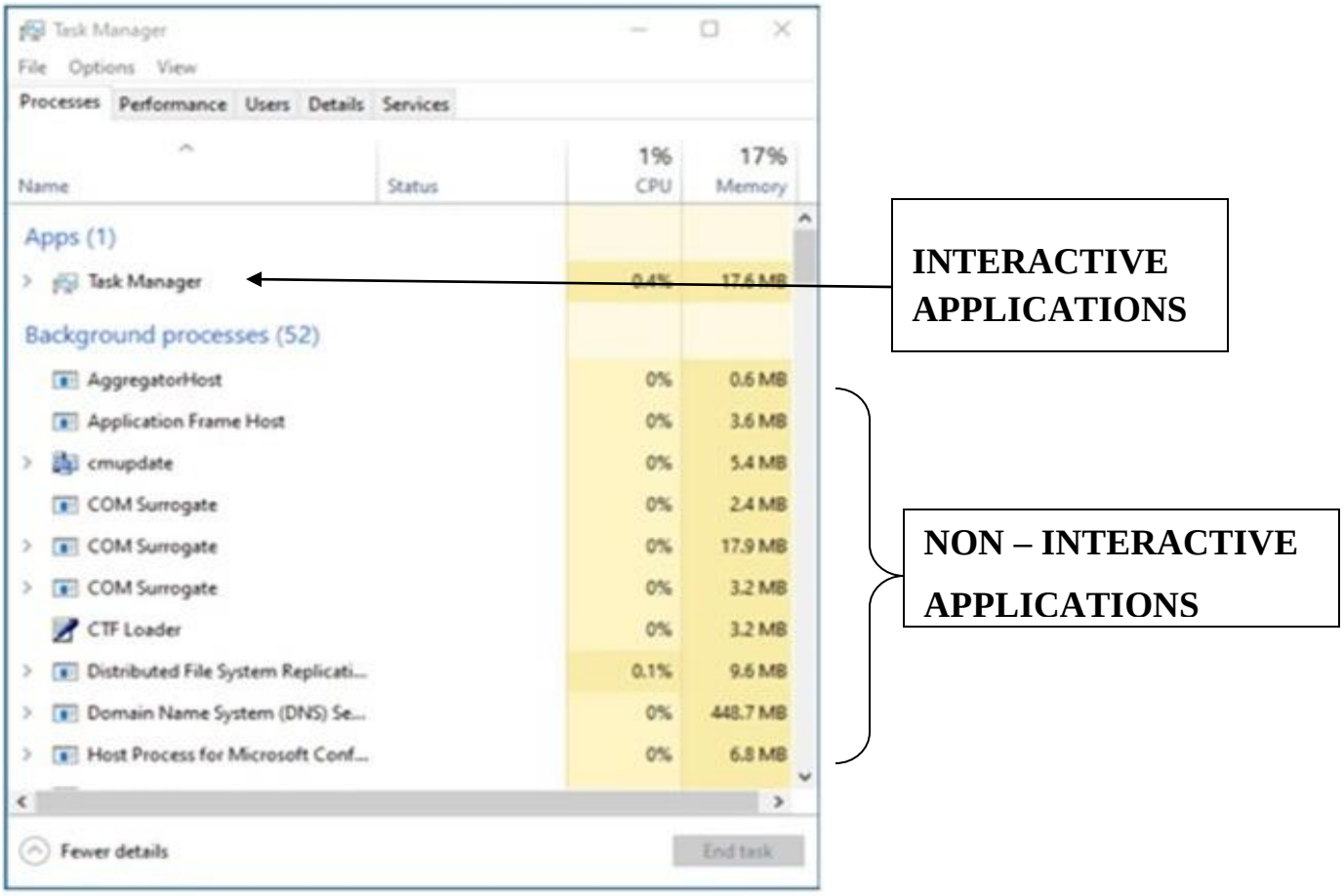
In Windows, **interactive applications require user input to function, while non-interactive applications, like background services, operate without direct user interaction**. Interactive applications, such as web browsers or word processors, provide a graphical user interface (GUI) where users can click, type, and interact with the program. Non-interactive applications, on the other hand, often run in the background without any visual interface, performing tasks like printing or updating software.

INTERACTIVE APPLICATIONS

- **User Interaction:** These applications require user input to perform their tasks, such as clicking buttons, typing in text, or selecting options from menus.
- **GUI:** They typically have a GUI that allows users to interact with the application visually.
- **Examples:** Web browsers, word processors, media players, and game engines are examples of interactive applications.

NON – INTERACTIVE APPLICATIONS

- **Background Processes:** These applications run in the background without a visible GUI, performing tasks automatically.
- **Services:** Services are a common type of non-interactive application that performs specific tasks like printing or managing network connections.
- **Automated Tasks:** They are often used for tasks that can be automated, such as software updates, virus scans, or data backups.
- **Examples:** System services, scheduled tasks, and background data processing are examples of non-interactive applications.



TOPIC – 2 : Groups, Dynamic Queries, Users.

Azure AD Groups

- **Static Groups :** Manually added members.
- **Dynamic Groups :** Members automatically added based on attributes.

  (Example : device.deviceOSType – contains “Windows”).

User vs Device Targeting

- **User Group Assignment :** App installs when the user logs in.
- **Device Group Assignment :** App installs regardless of who logs in.

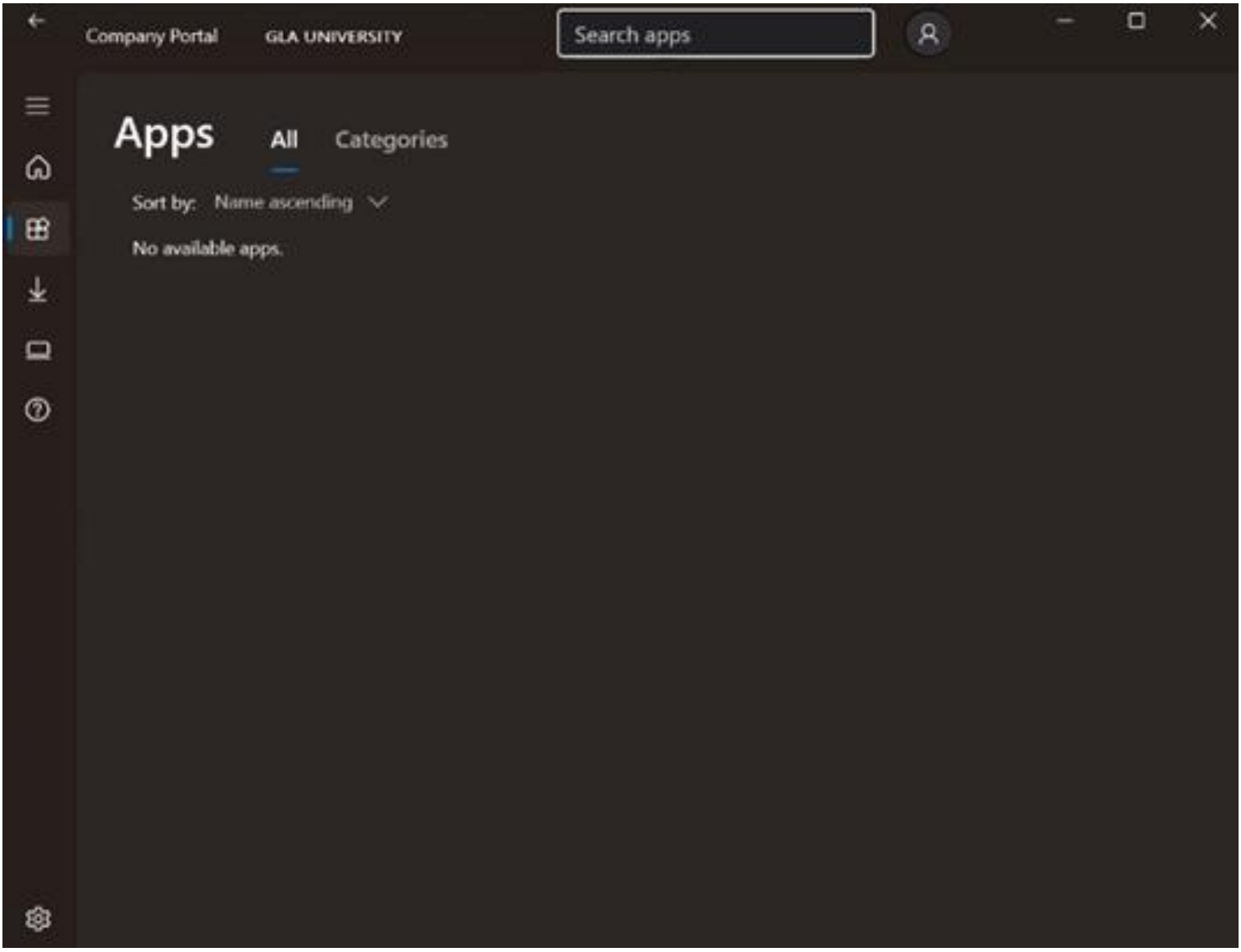
TOPIC - 3 : Required and Available App Assignments

REQUIRED

- Apps are force – installed based on assignment (user/device).
- Installation happens automatically respecting deadlines and applicability rules.

Available

- Apps are published to **Company Portal,** where users can install them manually on demand.



TOPIC – 4 : Process flow for a Win32/LOB App on Windows Client (IME Service).

Step by Step Flow:

- **Client Polls** Intune (every 1 hour or on-demand sync).
- **IME (Intune Management Extension)** evaluates assigned apps.
- **Detection Logic Check :**
    - Registry, MSI Product Code, File existence, etc..
    - If detection fails (i.e., app not found), it proceeds to install.
- **App gets downloaded** from Microsoft Endpoint CDN or custom source.
- **Installation is triggered** using :
    - Command-line passes (e.g., install.cmd/silent)
    - Under **System** context unless set to user.
- **Post-installation detection logic** re-runs.
    - If detection is successful – **success toast shown.**
    - If detection fails – **failure toast shown.**
- **Status sent back** to Intune for reporting.

TOPIC – 5 : Registries (LOB and Win32 Apps)

Common Registries Involved:

- **IME Settings:**
  HKLM\SOFTWARE\Microsoft\IntuneManagementExtension
- **App-specific Registries** (used for detection):
    - File path or registry value created after installation.
    - E.g., HKLM\SOFTWARRE\MyAppVendor\MyApp

TOPIC – 6 : App GUID and Registry Status

Each Win32 App has a unique GUID(found in Intune Admin Center or registry).

You can find installation state:

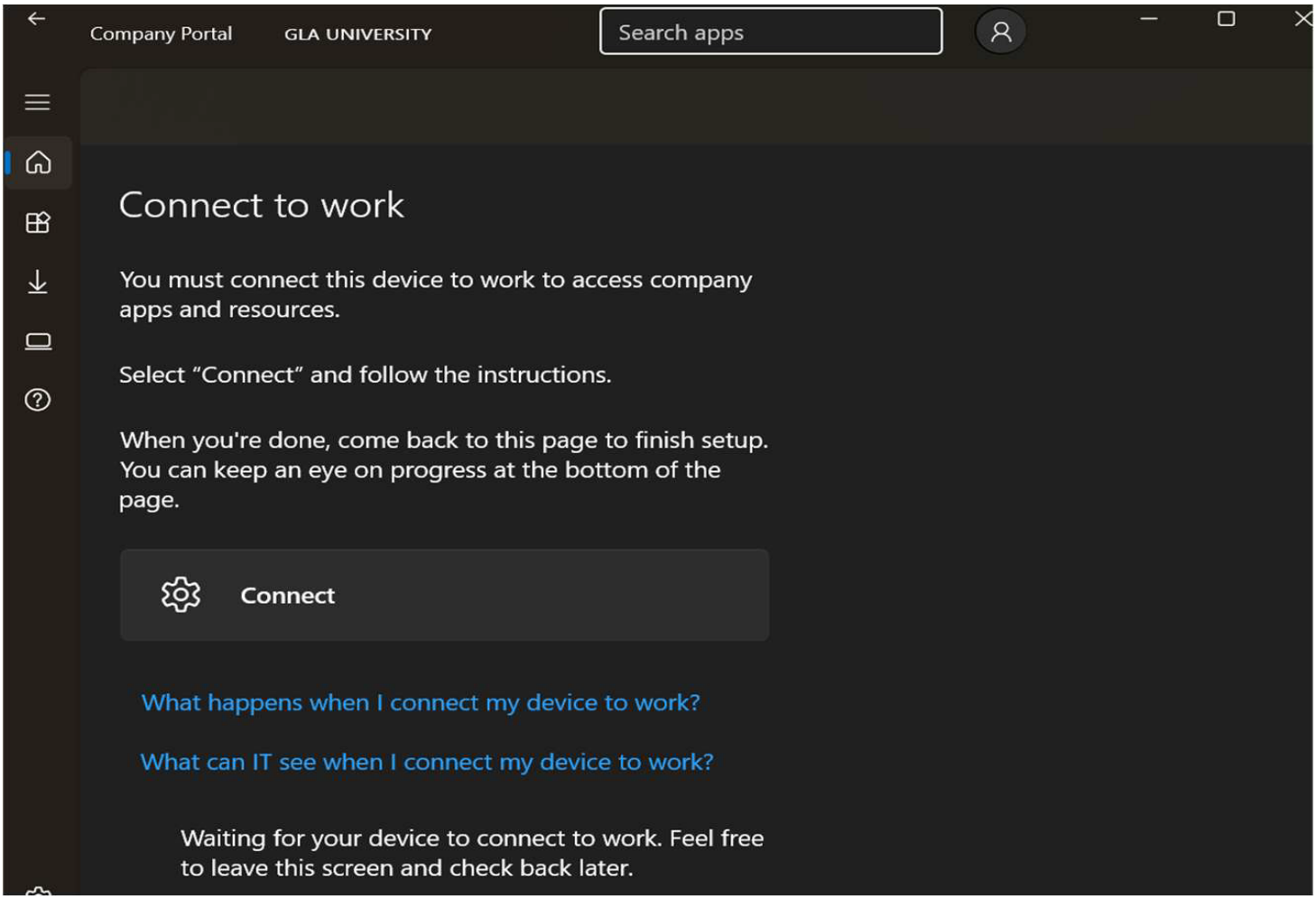
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\IntuneManagementExtension\Win32Apps\{App-GUID}

Values :

- **State :**
  - **0:** Not Installed
  - **1 :** Installed
  - **3 :** Failed
- **Exitcode =** App's MSI/EXE return code
- **LastError =** Error message or code
- **LastModifiedTimeUtc =** Timestamp of last action.

TOPIC – 7 : Company Portal

- GUI for **Available Apps** deployment.
- Reflects:
  - Assigned apps for current user
  - App status (installed, failed)
- **Won't show Required apps** – they install silently.



TOPIC – 8 : Log File Locations

Logs to Monitor :

- **IME Logs:**
  C:\ProgramData\Microsoft\IntuneManagementExtension\Logs\IntuneManagementExtension.log
- **App Logs (Custom):**
  If the installer writes its own log (like MSI: msiexec /l*v), check path specified in install command.
- **Event Viewer:**
  Applications and Services Logs > Microsoft >Windows > DeviceManagement-Enterprise-Diagnostics-Provider

TOPIC – 9 : How to sync after app Assignments

- **From Intune Portal :**
    - **Force Sync:** Devices > [Select Device] > Sync
    - **Assign App :** Wait for polling (approx. 60 mins)
- **From Client Side :**
    - Manual Sync (User side):
        - Settings > Accounts > Access work or school >Info > Sync
    - Intune Management Extension Immediate Sync:
- Restart-Service IntuneManagementExtension

TOPIC – 10 : Breakdown of Events in Log Files

IntuneManagementExtension.log

Key Log Events:

- IntuneManagementExtension starting up.
- Detecting app {GUID}
- Detection rule failed - proceeding with install.
- Starting install for {GUID}
- App install returned code 0 (Success)
- Detection post-installation passed
- Reporting success to service
- Errors to watch for:
- Install failed with exit code.
- Detection rule still failing.
- Download failed.
- App evaluation failed.

Step-by-Step Guide: Adding a .intunewin App in Intune Admin Center

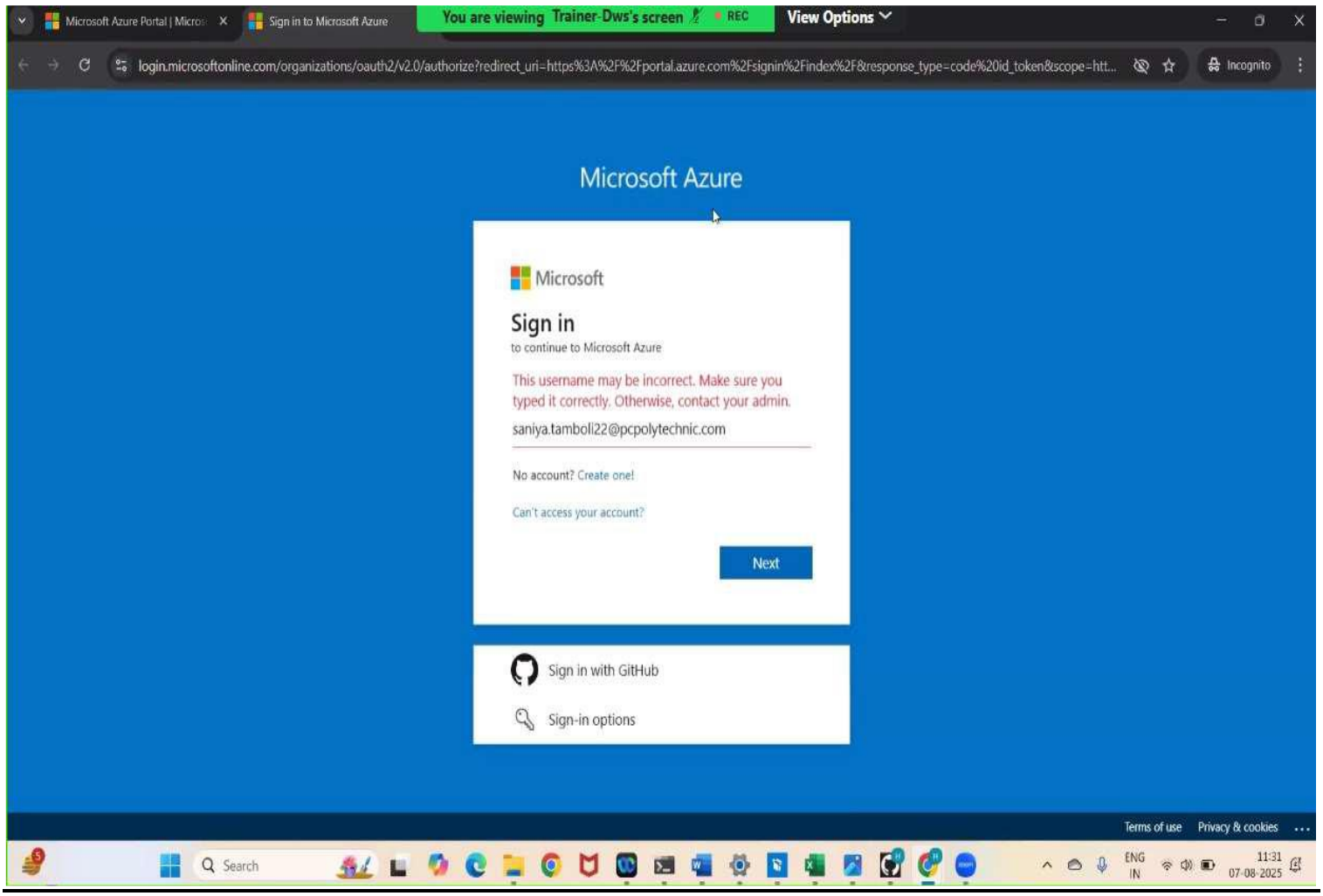
Pre-requisites

Before beginning:

- You should have the .intunewin package file ready.
- This file is created using the IntuneWinAppUtil.exe tool.
- You must have proper permissions in Intune (like App Admin or Intune Admin).

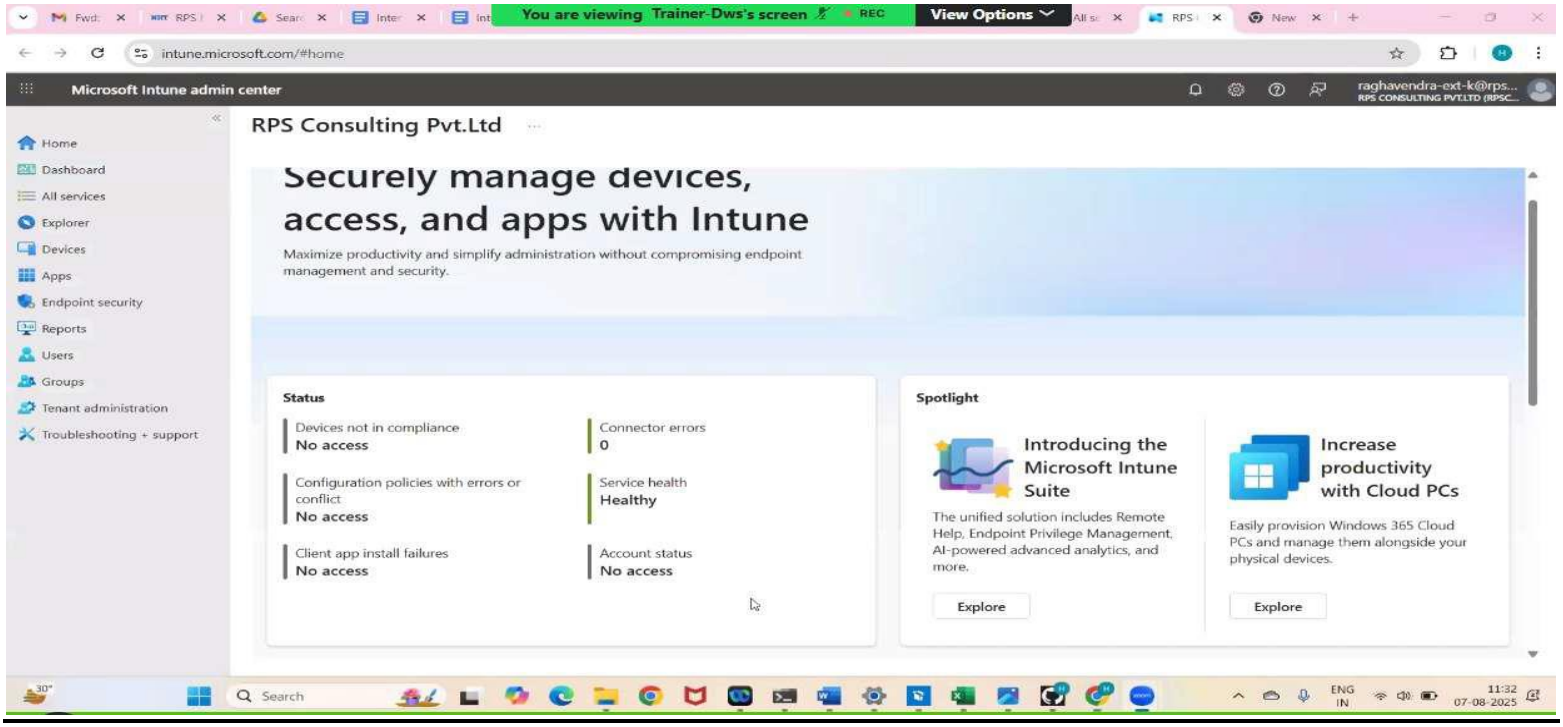
Step 1: Login to Intune Admin Center

- Go to: https://intune.microsoft.com
- Sign in with your admin credentials.



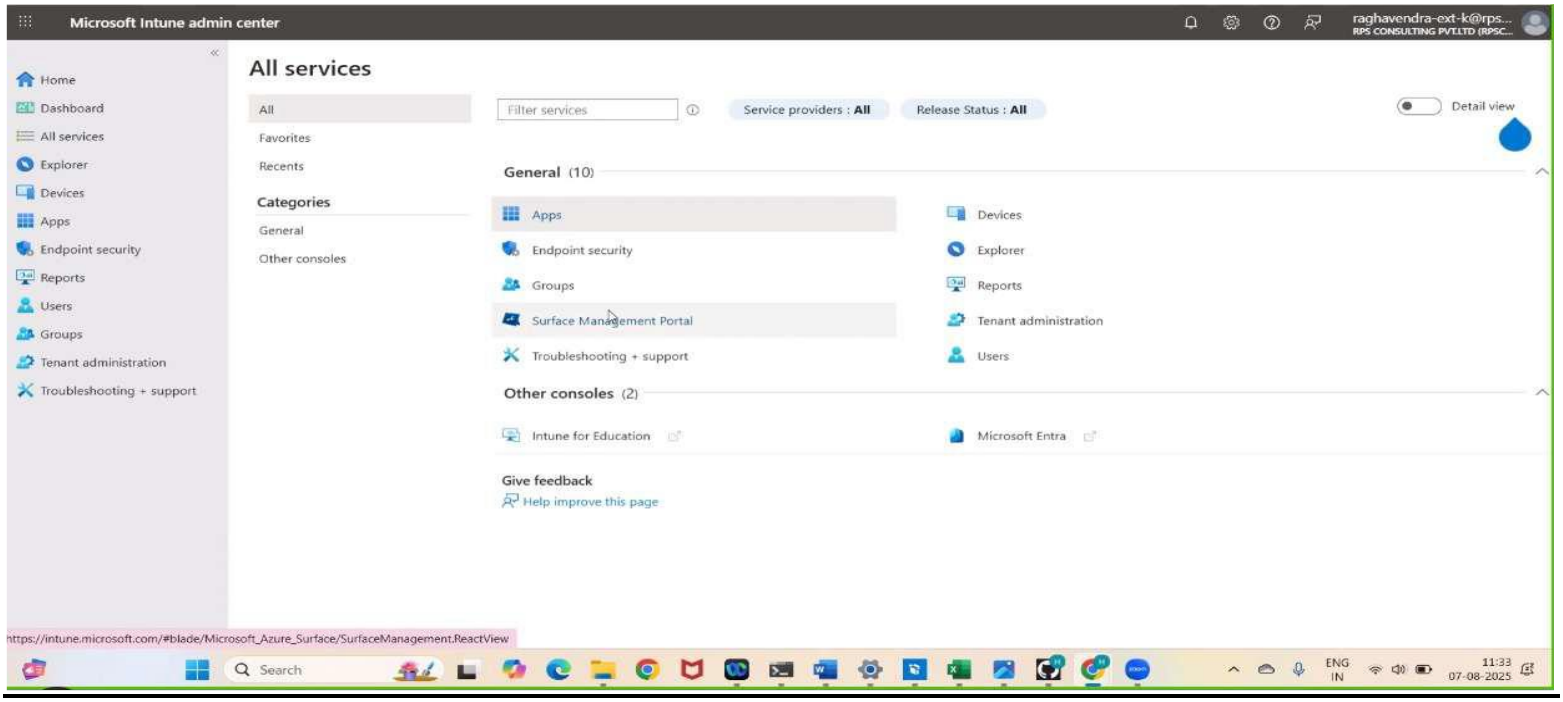
Step 2: Navigate to Apps

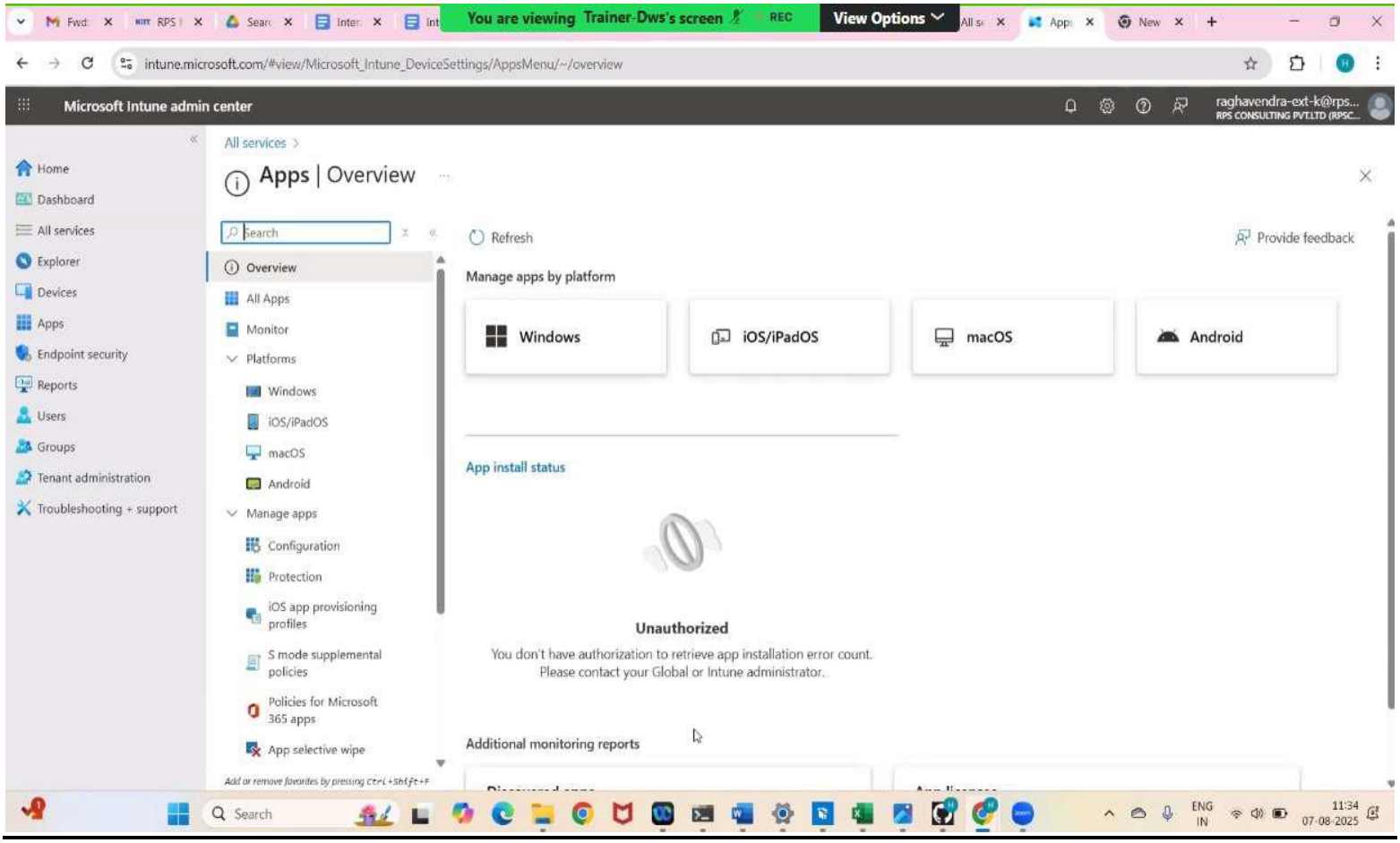
- In the left-hand navigation pane, click on:
    - Apps > All Apps



Step 3: Add a New App

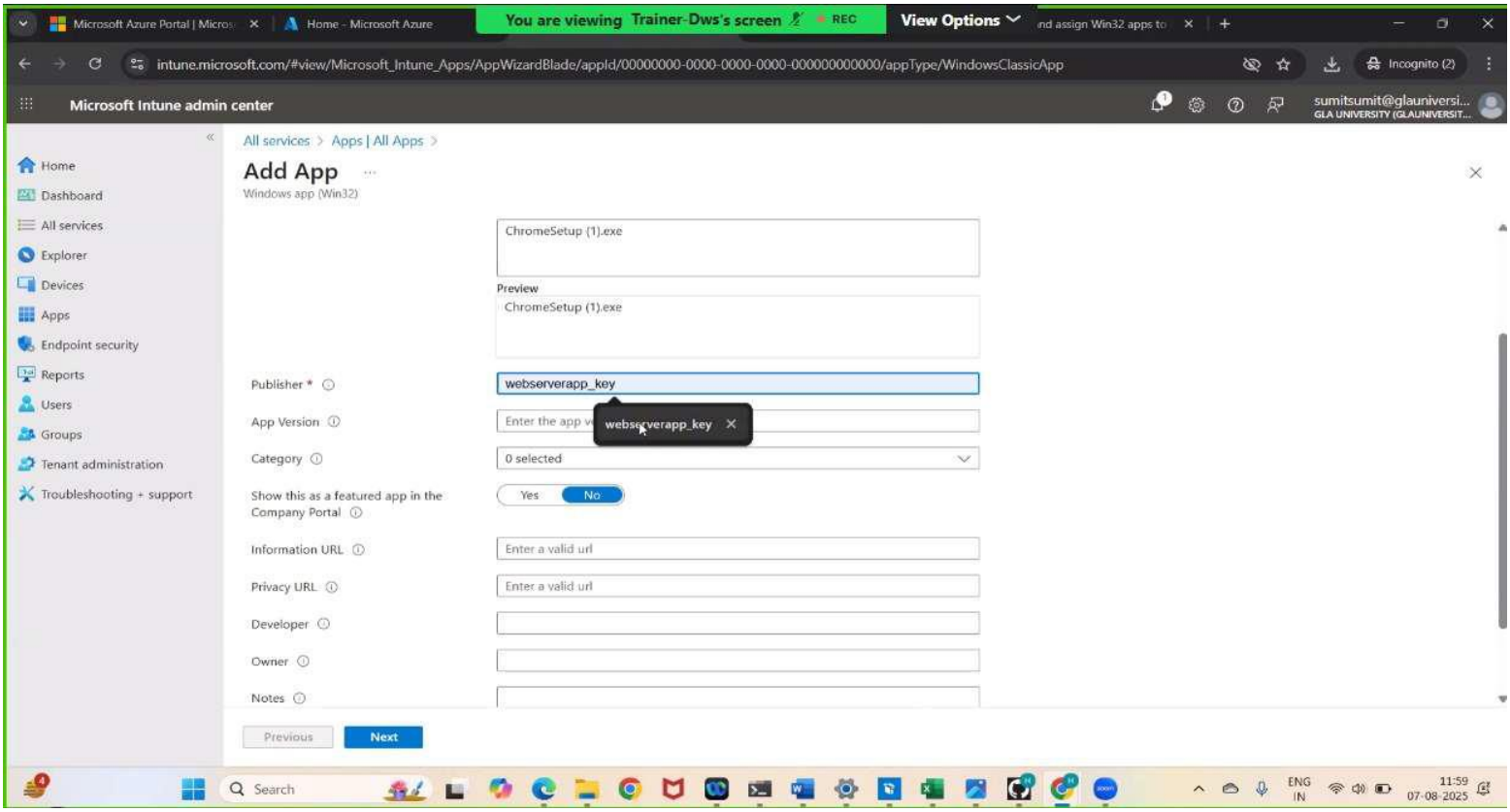
- At the top of the All Apps page, click + Add.
- Under App type, select:
    - Windows app (Win32) - Click Select





Step 4: App Information

- **Upload your .intunewin file.**
    - Browse to the .intunewin package you prepared.
- **Fill in the App Information:**
    - Name
    - Description
    - Publisher
    - App version (optional)
    - Category
    - Show this app in Company Portal – Yes/No
    - Information URL, Privacy URL (optional)
- **Click Next**



Step 5: Program (Install & Uninstall Commands)

- **Provide:**
  - Install command (e.g., setup.exe /quiet)
  - Uninstall command (e.g., setup.exe /uninstall /quiet)
- **Select:**
  - Install behavior: System or User
- **Device restart behavior (choose as applicable)**
- **Click Next**

Step 6: Requirements

- Operating System Architecture:
  - 32-bit / 64-bit or both
- Minimum OS Version:
  - e.g., Windows 10 1607
- Add any other requirements like disk space, RAM, etc.
- **Click Next**

Step 7: Detection Rules

Define how Intune will detect if the app is already installed:

- Choose Manually configure detection rules
- Click + Add:
    - Rule Type: MSI / File / Registry
    - Example (File):
        - Path: C:\Program Files\AppFolder
        - File: App.exe
        - Detection Method: File exists
- **Example (Registry):**
        - Key path: HKLM\Software\Vendor\App
        - Value: Version
        - Detection method: Equals, e.g., 1.0.0
- **Click Next**

Step 8: Assignments

- Choose who should receive this app:
    - Required – auto-installed on assigned devices/users
    - Available for enrolled devices – visible in Company Portal
    - Uninstall – to remove the app
- **Click Next**

Step 9: Review + Create

- Review all your settings.
- Click Create to upload the app and create the assignment.

Uploading may take a few minutes depending on file size.