

Batch Information:

- **Batch Start Date:** 2025-08-04
- **Batch Name:** WiproNGA_DWS_B5_25VID2550
- **First Name:** Kamran
- **Last Name:** Akmal
- **User ID:** 34958
- **Batch ID:** 25VID2557

Assignments

Topics

- Interactive and Non-Interactive Applications
- Required and Available App assignments
- Groups, Dynamic queries, Users
- Process Flow for an Application on Windows client via IME service. (From Polling to detection, to installation , to detection and toast notifications as success/failure)
- Registries with respect to LOB and Win32Apps
- Specific Registries with Application GUID which give you the status of Installation/Uninstallation.
- Log File locations
- Company Portal
- How to Sync once app assignments are done. (Intune Device Sync/ Company Portal Local side Sync)
- Breakdown of events in log files.

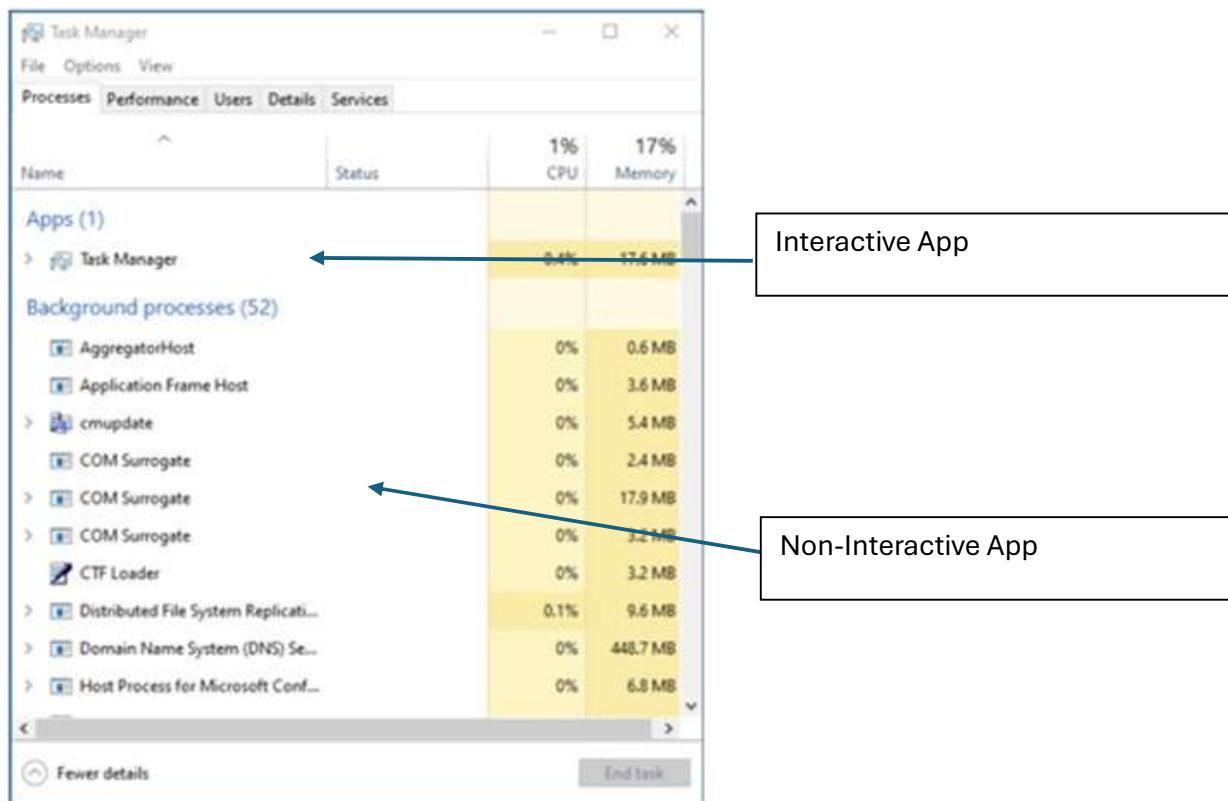
1. Interactive and Non-Interactive Applications

- **Interactive Apps:**

Apps that require user interaction during installation (e.g., showing UI, accepting license agreements). These usually fail in **System Context** if interaction is required.

- **Non-Interactive Apps:**

Silent installers using command-line switches (/quiet, /silent) that don't require user input. Ideal for Intune deployments.



2. 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.

3. Groups, Dynamic Queries, Users

- **Azure AD Groups** used to assign apps:

- **Static Groups:** Manually added members.
- **Dynamic Groups:** Members automatically added based on attributes (e.g., 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.

4. Process Flow for a Win32/LOB App on Windows Client (IME Service)

Step-by-Step Flow:

- 1. Client polls Intune (every 1 hr or on-demand sync).**
- 2. IME (Intune Management Extension) evaluates assigned apps.**
- 3. Detection Logic Check:**
 - Registry, MSI ProductCode, file existence, etc.
 - If detection fails (i.e., app not found), it proceeds to install.
- 4. App gets downloaded** from Microsoft Endpoint CDN or custom source.
- 5. Installation is triggered** using:
 - Command-line passed (e.g., install.cmd /silent)
 - Under **System** context unless set to user.
- 6. Post-installation detection logic** re-runs.
 - If detection is successful → **Success toast shown.**
 - If detection fails → **Failure toast shown.**
- 7. Status sent back** to Intune for reporting.

5. Registries (LOB and Win32 Apps)

Common Registries Involved:

- IME Settings:**

HKLM\SOFTWARE\Microsoft\IntuneManagementExtensio
n

- App-specific Registries** (used for detection):

- File path or registry value created after installation.
- E.g., HKLM\SOFTWARE\MyAppVendor\MyApp

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
- LastErrorMessage = Error message or code
- LastModifiedTimeUtc = Timestamp of last action

7. Log File Locations

Logs to Monitor:

- IME Logs:**

C:\ProgramData\Microsoft\IntuneManagementExtension\Logs\IntuneManagementExtension.log

- App Logs (Custom):**

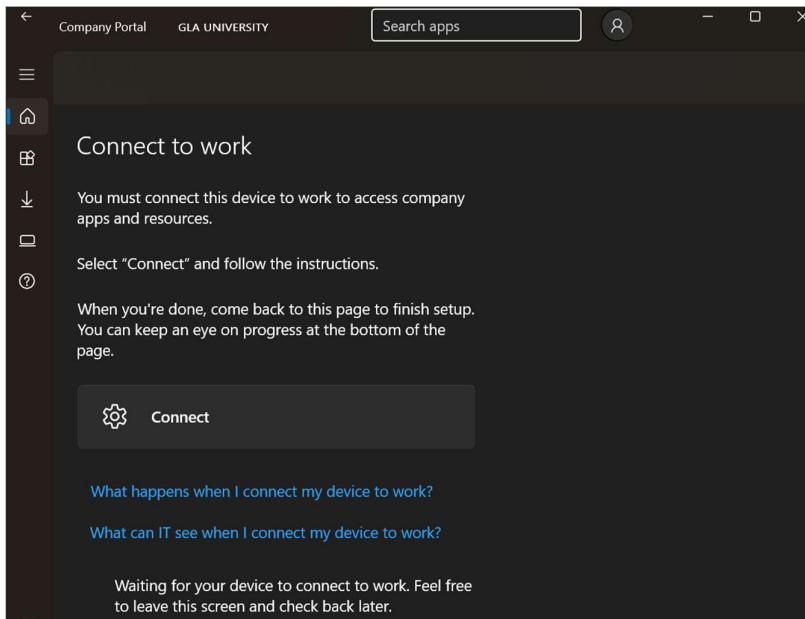
If the installer writes its own log (like MSI: msiexec /l*v), check path specified in install command.

- Event Viewer:**

- Applications and Services Logs > Microsoft > Windows > DeviceManagement-Enterprise-Diagnostics-Provider

8. 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.



9. How to Sync After App Assignments

A. From Intune Portal

- **Force Sync:** Devices > [Select Device] > Sync
- **Assign App → Wait for polling (approx. 60 mins)**

B. From Client Side

- **Manual Sync (User side):**
 - **Settings > Accounts > Access work or school > Info > Sync**
- **Intune Management Extension Immediate Sync:**

Restart-Service IntuneManagementExtension

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

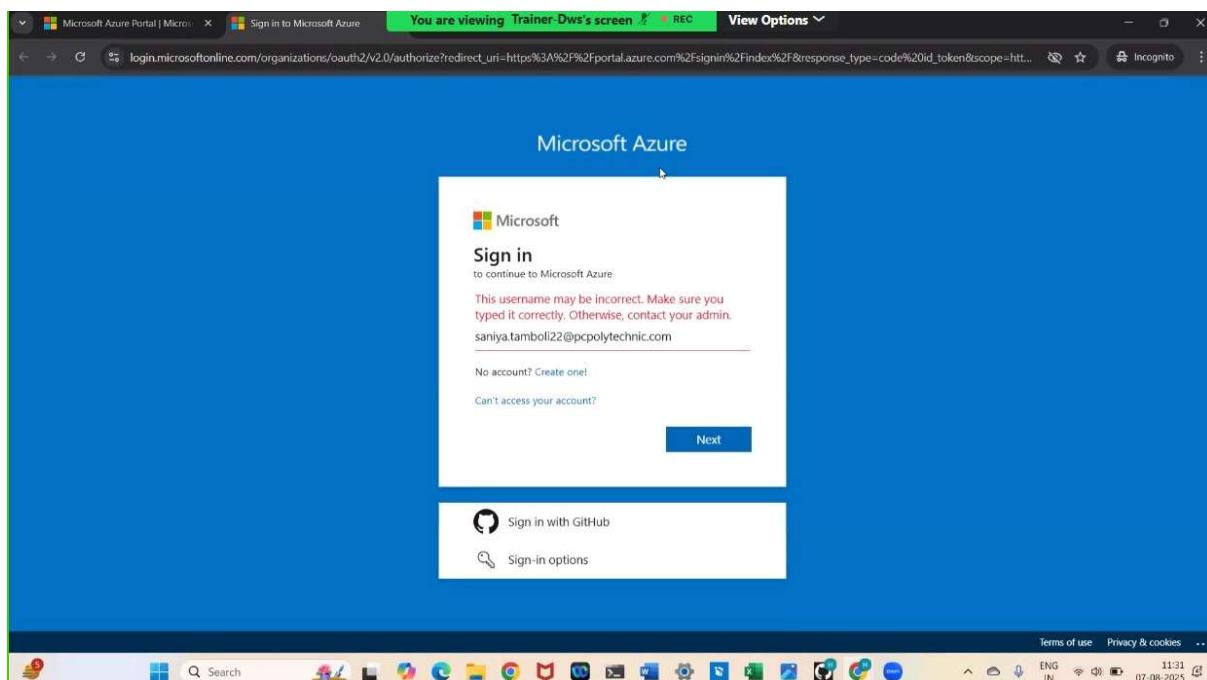
Pre-requisites

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

1. Go to: <https://intune.microsoft.com>
2. Sign in with your admin credentials.



Step 2: Navigate to Apps

1. In the left-hand navigation pane, click on:

- o Apps > All Apps

The screenshot shows the Microsoft Intune admin center interface. The left sidebar includes options like Home, Dashboard, All services, Explorer, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The main content area displays a banner: "Securely manage devices, access, and apps with Intune". Below it is a "Status" section with four items: "Devices not in compliance" (No access), "Connector errors" (0), "Configuration policies with errors or conflict" (No access), "Service health" (Healthy), "Client app install failures" (No access), and "Account status" (No access). To the right is a "Spotlight" section titled "Introducing the Microsoft Intune Suite", which includes a "Cloud PCs" card with the text "Increase productivity with Cloud PCs" and a link to "Explore". The taskbar at the bottom shows various pinned icons and the system tray.

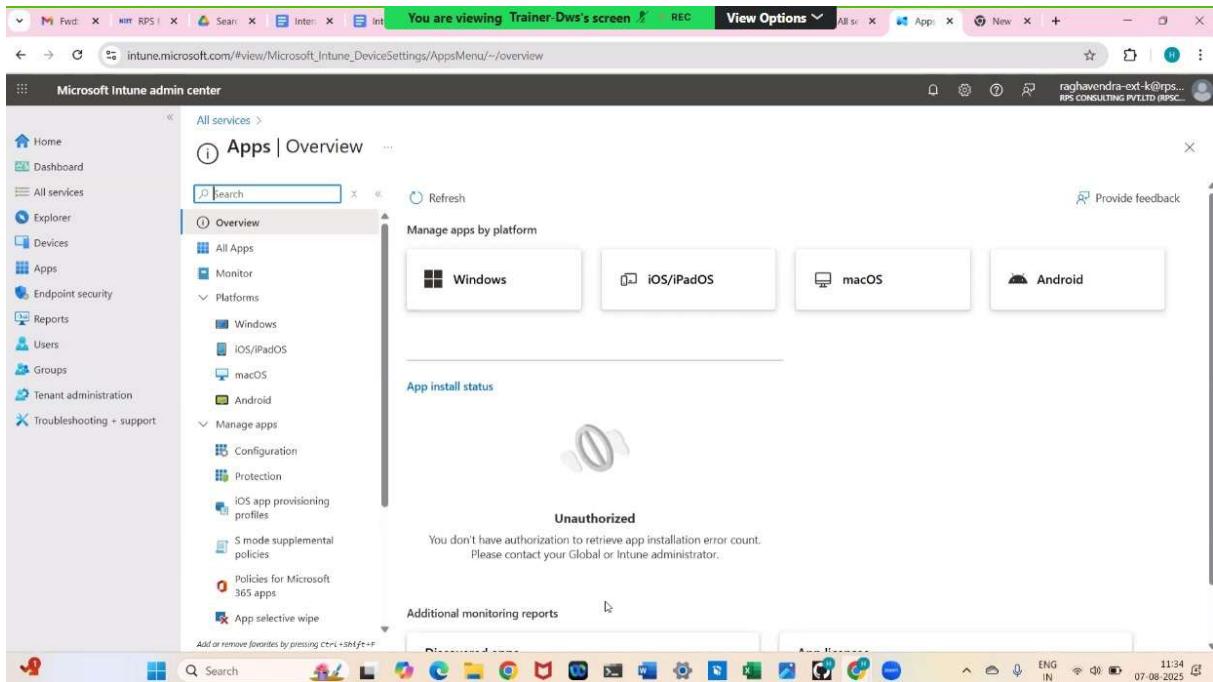
Step 3: Add a New App

1. At the top of the All Apps page, click + Add.

2. Under App type, select:

- o Windows app (Win32) → Click Select

The screenshot shows the Microsoft Intune admin center interface. The left sidebar includes options like Home, Dashboard, All services, Explorer, Devices, Apps, Endpoint security, Reports, Users, Groups, Tenant administration, and Troubleshooting + support. The main content area displays a "All services" list under the "General" category, which includes "General (10)" and "Other consoles (2)". The "General" section lists "Apps", "Devices", "Endpoint security", "Groups", "Surface Management Portal", "Reports", "Tenant administration", and "Users". The "Other consoles" section lists "Intune for Education" and "Microsoft Entra". The taskbar at the bottom shows various pinned icons and the system tray.



Step 4: App Information

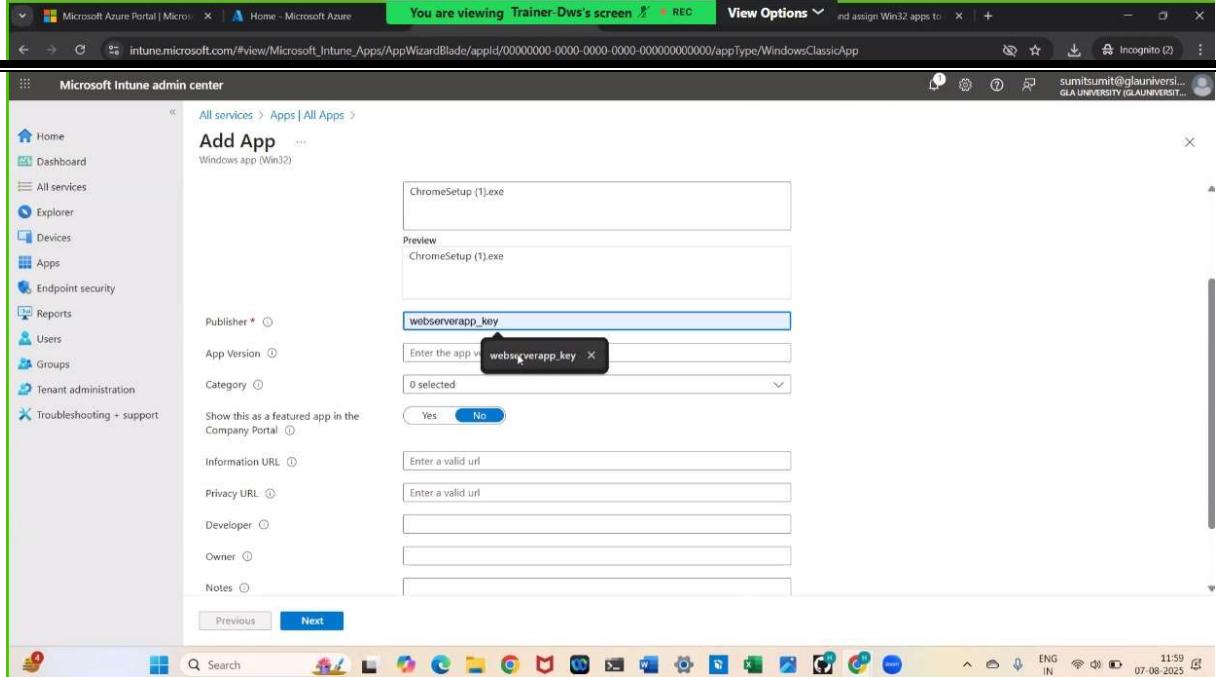
1. Upload your .intunewin file.

- Browse to the .intunewin package you prepared.

2. 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)

1. Provide:

- Install command (e.g., setup.exe /quiet)
- Uninstall command (e.g., setup.exe /uninstall /quiet)

2. Select:

- Install behavior: System or User

3. Device restart behavior (choose as applicable)

→ Click Next

Step 6: Requirements

1. Operating System Architecture:

- 32-bit / 64-bit or both

2. Minimum OS Version:

- e.g., Windows 10 1607

3. 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:

1. Choose Manually configure detection rules

2. 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

1. 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.