Application Packaging :

- Application packaging is the process of preparing software applications for consistent deployment and installation across multiple systems or environments. It's widely used in IT environments to simplify software management, ensure standardization, and reduce deployment errors.
- **Application packaging** involves wrapping an application and all its dependencies into a standardized, deployable format such as .msi, .msix, .appx, .exe
- Application Packaging helps organizations in need of a way to take the burden off their IT support teams while providing an improved end-user experience.

Benefits of Application Packaging :
1. Providing a stable digital environment.
2. Reduce the cost of support .
3. Improve the efficiency of packaging process.
4. Improves application management
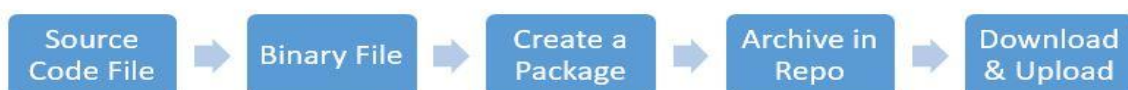5. Improve security of digital systems

Purpose :

- Consistency

- Standardization

- Ease to deploy

- Cost Saving

- Simplified Updates

Why do we need a Application Packaging?

- Hiding the complexity of the software configuration
- Having the proper versioning
- Having the name of the software
- Remove it, Upgrade it, Install it

Lifecycle of Application Package

Source Code File → Binary File → Create a Package → Archive in Repo → Download & Upload

Application Packaging Process :

End to End Process :

This process makes it easier to install, manage, and update software on various devices and environments.

In most organizations, the end-to-end packaging process consists of 3 main steps

1. **Application Discovery**
   - 1.Identify needs
   - 2. Gather Information
   - 3. Review & Assess
2. **Application Packaging**
   - 1.Create the Package
   - 2. Customize
3. **UAT (User Acceptance Testing)**
   - 1.Validate Functionality
   - 2. Verify compatibility
   - 3. Quality Assurance

MSIX PACKAGING TOOL :

The MSIX Packaging Tool enables you to repackage your existing desktop applications to the MSIX format. It offers both an interactive UI and a command line for conversions, and gives you the ability to convert an application without having the source code. We want to enable IT Pros to convert their existing assets to MSIX, to give them a better way to do packaging and app management.

Steps to Install MSIX Packaging :

MSIX Packaging Tool is now available from the Microsoft Store. You can run your desktop installers through this tool and obtain an MSIX package that you can install on your machine.

Installing an MSIX App via the Microsoft Store :

1. Click on the **Microsoft Store** icon in your Start menu or taskbar.

2. Use the search bar at the top to find the app by name.

3. Select the App : Click on the app to view its details

4 . Click "GET " or "INSTALL".

5. Wait for Download and Installation.

6. You will see progress bar and a notification once it is ready .

7. LAUNCH the app.

8. Click "OPEN" directly from the store page .