## Practice Activity

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## Summary

## 1. Device Driver Handling in MSI

| **File Type** | **Purpose in Installation** | **Example Use** |
| --- | --- | --- |
| .inf | Instructions for installing drivers | Defines driver details and configurations |
| .sys | Core driver system file | Communicates with hardware |
| .cat | Catalog file for driver signing | Ensures integrity and authenticity |

* These files are essential when applications require hardware functionality.
* Installation logs (e.g., setupapi.dev.log) are reviewed to confirm proper driver setup.

## 2. Context Types in Windows Execution

| **Context Type** | **Description** | **Typical Use Case** |
| --- | --- | --- |
| **User Context** | Impacts only the current user’s environment. | Installing personal software |
| **Admin Context** | Requires elevated privileges to make system changes. | Configuring system-wide settings |
| **System Context** | Grants full machine-level access. | Enterprise-level deployments |

## 3. Windows 10 vs. Windows 11 for Application Packaging

**Windows 11**

* Modern interface with Snap Layouts.
* Improved security (e.g., TPM 2.0).

**Windows 10**

* More stable in production environments.
* Wider adoption in businesses.

**Note:** Test application packages independently on both operating systems for full compatibility.

## 4. Scheduled Tasks within MSI

**Capabilities:**

* Schedule scripts to run at logon, startup, or specific times.
* Automate repetitive actions such as file cleanup or updates.

## 5. Active Setup & Logon Scripts

* **Active Setup**: Executes once per user on login to apply registry settings or configurations.
* **Logon Scripts**: Performs tasks like file copying and user profile updates during login.

## 6. Steps in the Application Packaging Process

1. **Discovery** – Identify software requirements and dependencies.
2. **Packaging** – Build MSI, MSIX, or App-V package.
3. **Testing (UAT)** – Validate on a clean test environment.
4. **Deployment** – Distribute via SCCM or Intune.

## 7. Application Deployment Models

| **Model Type** | **Best For** | **Features** |
| --- | --- | --- |
| Application Model | Full-scale applications | Dependency handling, detection logic |
| Package Model | Utilities or scripts | Lightweight, quick deployment |

## 8. Benefits of Application Packaging

* Uniform installation across systems.
* Faster and automated deployments.
* Reduced user support issues.
* Pre-configured settings for consistency.
* Better security through controlled installations.
* Easier updates and maintenance.
* Multi-OS compatibility checks.
* Simple rollback or repair.
* Deployment tracking and reporting.
* Integration with SCCM/Intune.