## Purpose

The FLEXroomSummerUpdates2024.exe executable is designed to automate various software updates, manage Meeting OWL firmware, and configure system settings in FLEX classrooms. Digital signing is necessary to ensure the script's integrity, authenticity, and to comply with system execution policies.v

## Locating the Executable on SharePoint

### SharePoint URL

Navigate to the following URL to access the ZoomUpdateFixer folder containing the executable: [ZoomUpdateFixer](https://rtcedu.sharepoint.com/teams/TheFLEXTeam/Shared%20Documents/Forms/AllItems.aspx?id=%2Fteams%2FTheFLEXTeam%2FShared%20Documents%2FCITL%20Power%20Shell%20Projects%2FZoomUpdateFixer&viewid=e9da7a58%2D64b4%2D402b%2Dbe39%2D6f5a5093ae43)

### Local Path

If accessing via a synced library or mapped drive, use the following local path:

\\rtcedu.sharepoint.com@SSL\teams\TheFLEXTeam\Shared Documents\CITL Power Shell Projects\ZoomUpdateFixer\FLEXroomSummerUpdates2024.exe

## Steps to Test the Executable

### 1. Download the Executable

1. Open your web browser and go to: [The FLEX Team SharePoint](https://rtcedu.sharepoint.com/teams/TheFLEXTeam).
2. Click on Documents in the left-hand navigation pane.
3. Navigate to CITL Power Shell Projects and open the ZoomUpdateFixer folder.
4. Click on the FLEXroomSummerUpdates2024.exe file.
5. Select Download to save the file to your local machine.

### 2. Set Up a Test Environment

1. **Isolate the Test Environment:**
   * Use a virtual machine (VM) or a dedicated test system to ensure the testing does not interfere with production environments.
2. **Restore a Clean Snapshot:**
   * Ensure the test environment starts from a clean state to avoid contamination from previous tests.

### 3. Execute the File and Monitor

1. **Run the Executable:**
   * Double-click the FLEXroomSummerUpdates2024.exe file to execute it.
2. **Monitor System Changes:**
   * Use system monitoring tools to track changes made by the executable. Tools like Process Monitor (ProcMon) from Sysinternals can be helpful.
3. **Check for Errors:**
   * Observe the execution process for any errors or unexpected behavior.
4. **Verify Functionality:**
   * Ensure that all intended functions are performed correctly, such as updating applications, configuring settings, and managing firmware.

### 4. Security and Compliance Checks

1. **Antivirus and Malware Scan:**
   * Scan the executable using up-to-date antivirus and anti-malware tools to ensure it is free from malicious code.
2. **Verify Script Integrity:**
   * Ensure the script has not been tampered with since its creation.

## Steps to Digitally Sign the Executable

### 1. Obtain a Code Signing Certificate

Ensure you have a code signing certificate from a trusted certificate authority (CA) or a self-signed certificate if applicable.

### 2. Sign the Executable

Use signtool.exe provided by the Windows SDK to sign the executable.

#### Command Example

signtool sign /f "path-to-your-certificate.pfx" /p "your-password" /t "http://timestamp.digicert.com" "C:\path\to\FLEXroomSummerUpdates2024.exe"

Replace the following placeholders:

* "path-to-your-certificate.pfx": Path to your code signing certificate.
* "your-password": Password for the certificate.
* "C:\path\to\FLEXroomSummerUpdates2024.exe": Local path to the downloaded executable.

### 3. Verify the Digital Signature

1. **Check the Signature:**
   * After signing, use the following command to verify the digital signature:

signtool verify /pa /v "C:\path\to\FLEXroomSummerUpdates2024.exe"

### 4. Upload the Signed Executable Back to SharePoint

1. Navigate back to the ZoomUpdateFixer folder on SharePoint.
2. Select Upload and choose the signed FLEXroomSummerUpdates2024.exe file.
3. Confirm that the signed executable has replaced the previous version.

## Functions of the Executable

### Update Applications

* **Zoom Client**: Updates the Zoom client to the latest version.
* **Browsers**: Updates Google Chrome, Mozilla Firefox, and Microsoft Edge.
* **Microsoft Office Desktop Apps**: Updates PowerPoint, Word, and Excel.

### Update Device Firmware

* **Meeting OWL Device**: Checks network connectivity and updates firmware using the OWL app.

### Configure System Settings

* **Mouse Settings**: Configures mouse pointer size and color for better visibility.
* **Automatic Timeout**: Extends screen timeout to 30 minutes.

### Check and Update Plugins

* **Okta Plugin**: Verifies and updates the Okta plugin in Chrome and Firefox.

## Contact Information

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