

WIPRO NGA Program – DWS

Capstone Project Presentation – 4rd September 2025

Title : - Add a Launch Condition Restrict installation to certain OS versions or hardware

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APPLICATION REPACKAGING



INTRODUCTION :-

This project demonstrates creating a restricted software installer that uses a **launch condition** to ensure an application is only installed on a specific OS. The two-step process, using an application re-packager and an installer tool, prevents compatibility issues and reduces support overhead. The final product is a reliable package that validates the system before installation.

WHAT IS APPLICATION REPACKAGING:-

Application repackaging converts an original software installer into a new, standardized package like an MSI.

It works by capturing all system changes made during a clean installation. This new package is highly customizable, enabling silent installations and simplifying large-scale software deployment for administrators.

BENEFITS :-

Standardization: Repackaging converts various installation formats into a single, uniform standard like MSI. This simplifies software management and large-scale deployment by providing a consistent installation experience across all applications.

Customization: It allows for extensive modifications to the original installation, such as adding or removing components and pre-configuring settings. This enables administrators to tailor applications to meet specific organizational requirements without needing the source code.

Troubleshooting & Compatibility: By creating a detailed record of an application's system changes, repackaging makes it easier to troubleshoot issues. It also allows for the implementation of launch conditions to prevent installation on unsupported systems, proactively ensuring compatibility.

Objective: To implement a launch condition in a repackaged software installer to ensure it can only be installed on specific operating system (OS) versions or hardware, thereby preventing compatibility issues.

Prerequisites:

1. **Clean Virtual Machine** to perform the Activity.
2. **Advanced Installer & Re-installer Package.**
3. **The Application** which is to be repackaged- **Cloudflare WARP**

Minimum System Requirements

CPU: A Core 2 class processor or equivalent is the baseline.

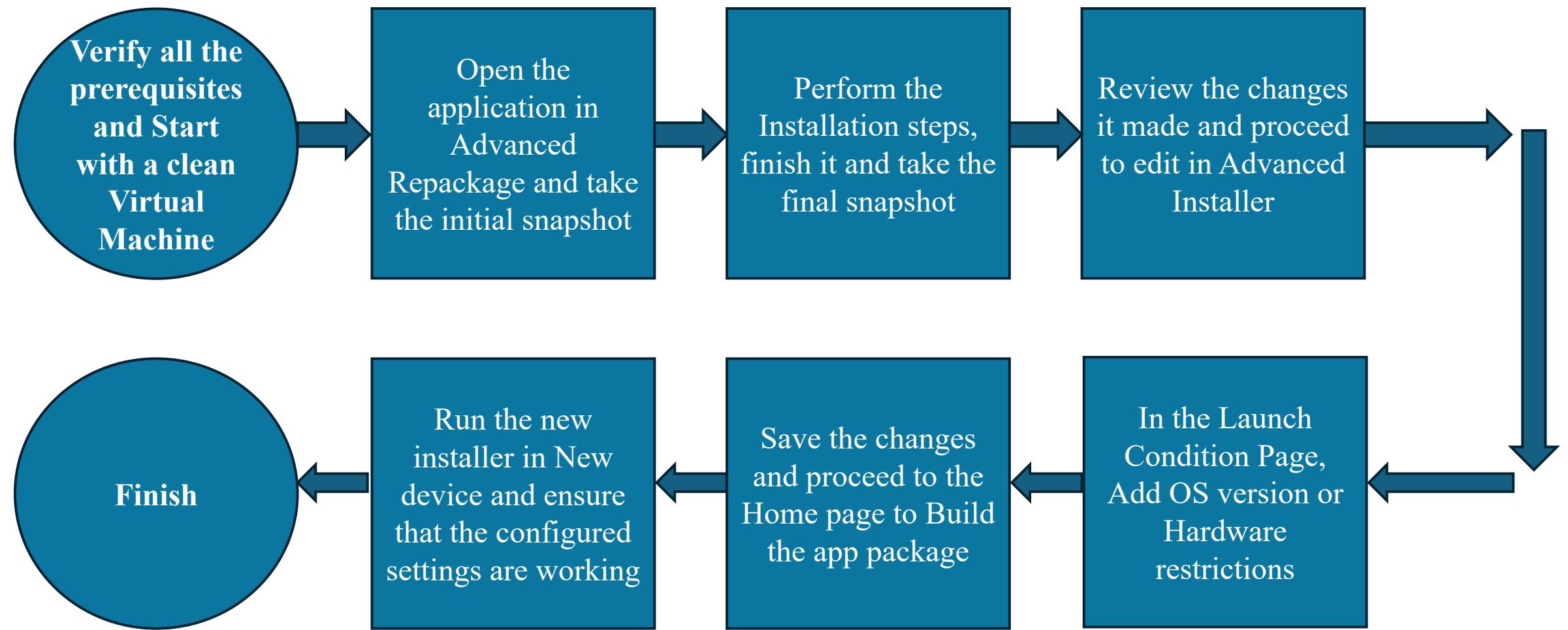
RAM: You need at least 1 GB of RAM to run the application.

Storage: A minimum of 2 GB of free hard drive space is required for installation and operation.

Display: The minimum supported screen resolution is 1366x768.

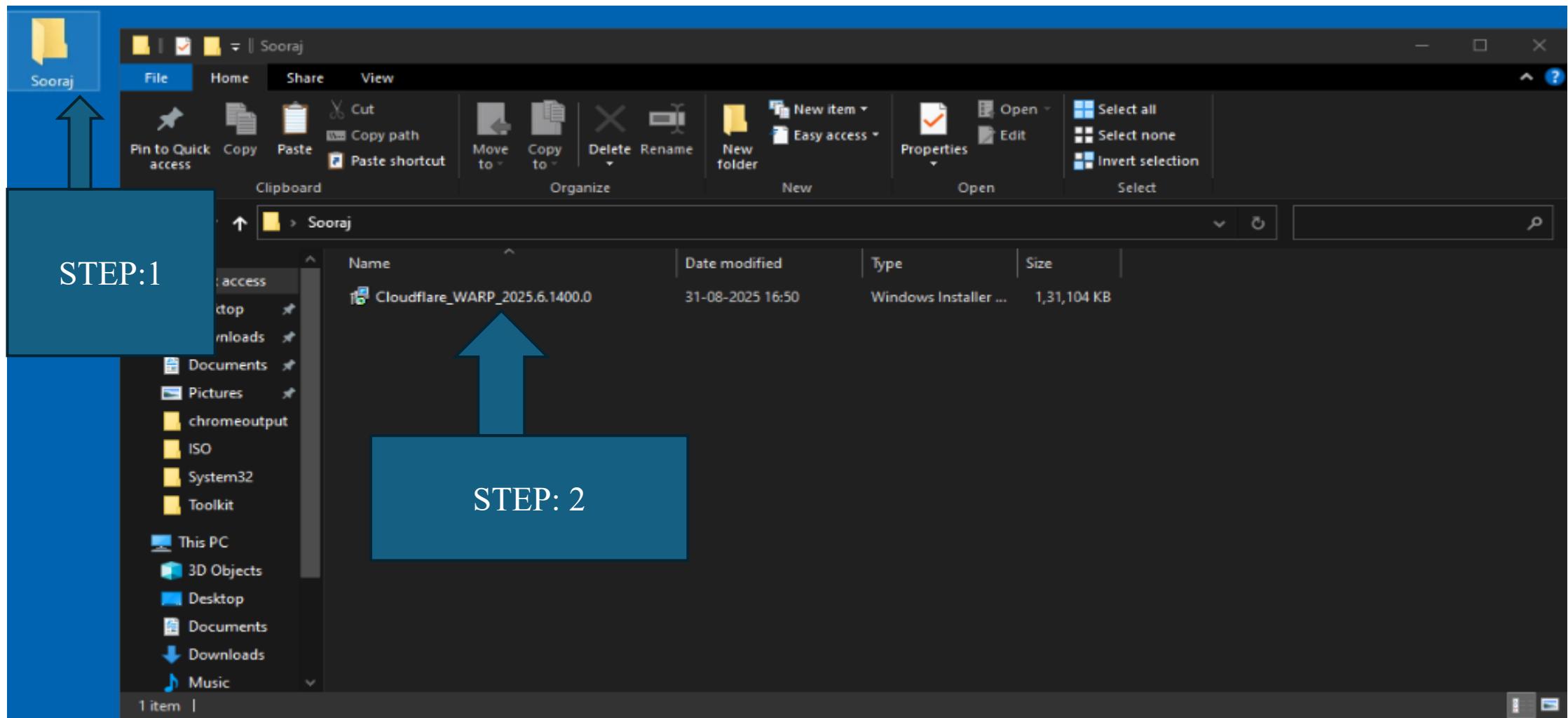
Operating System: Advanced Installer requires Windows 10 or newer to run.

Workflow Diagram

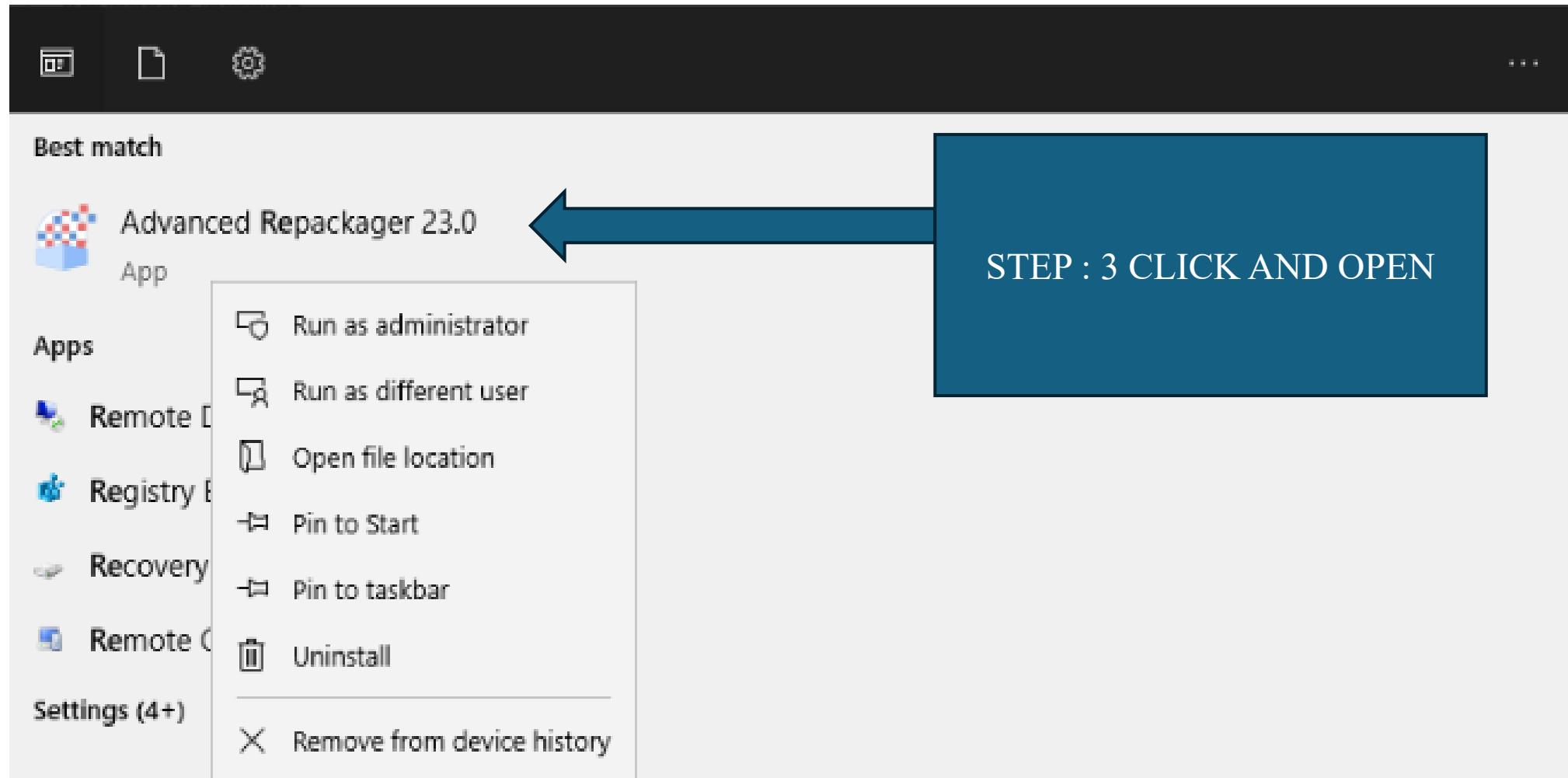


1. INITIAL SETUP AND REPACKAGING:

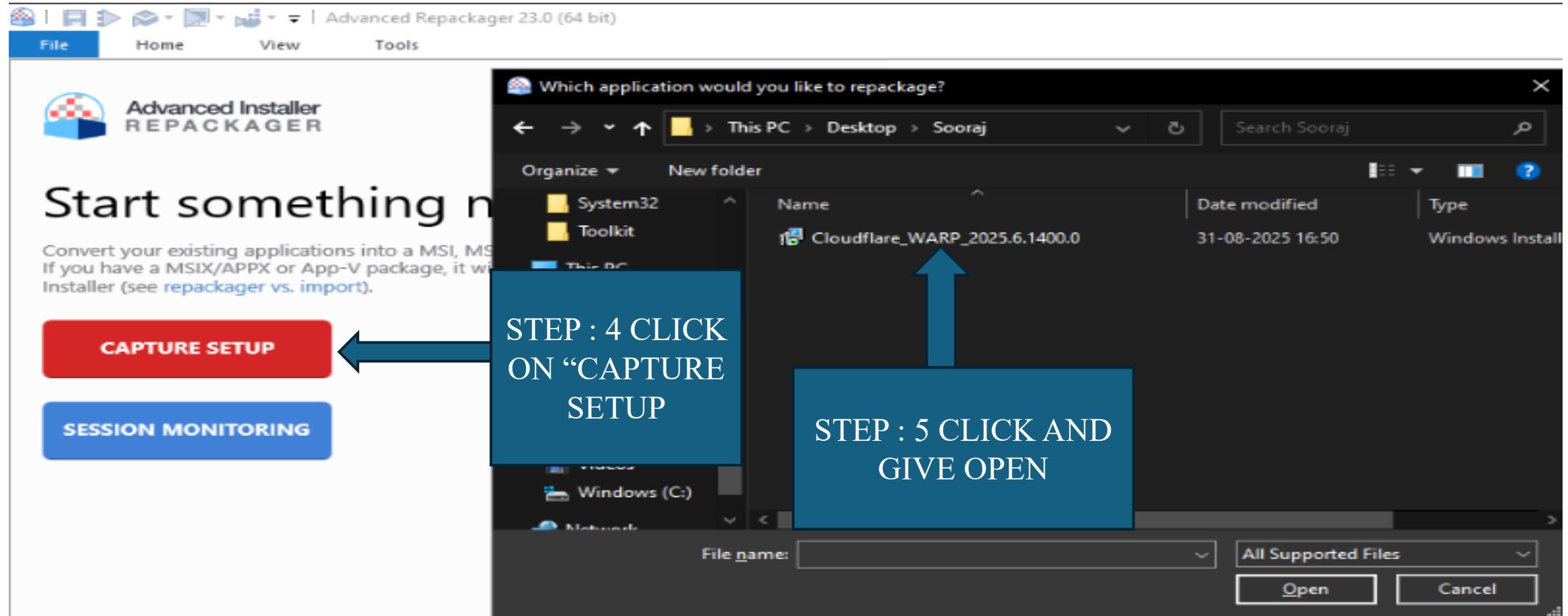
STEP 1:CREATE A FOLDER TO SAVE YOUR REPACKAGED MSI FILE.



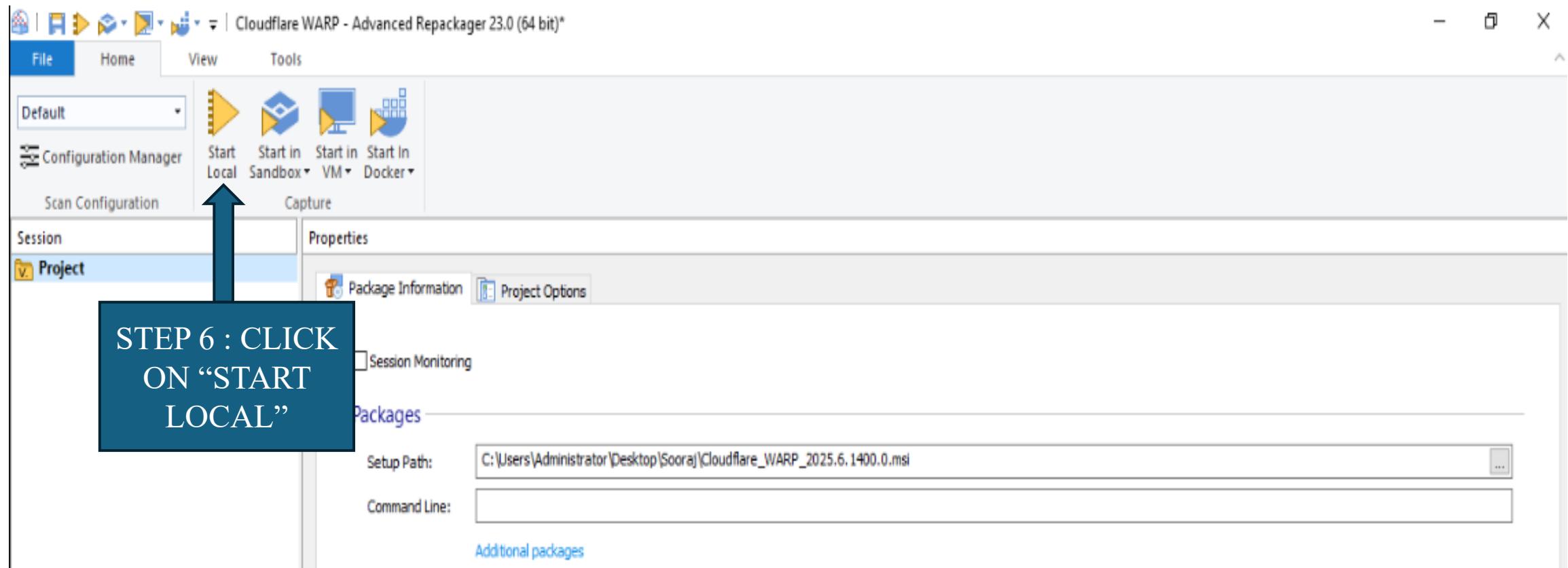
STEP 2:OPEN THE APPLICATION REPACKAGING TOOL.



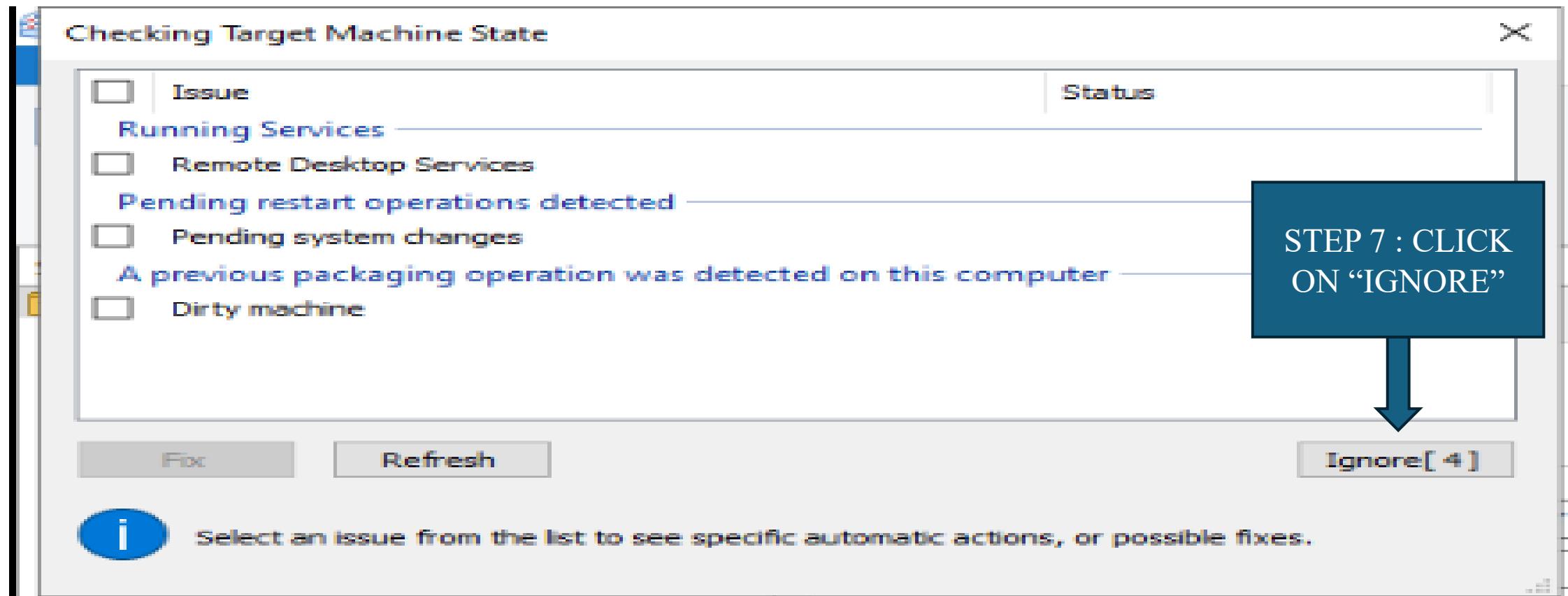
STEP 3 :CLICK ON "CAPTURE SETUP." SELECT THE MSI FILE YOU WANT TO REPACKAGE AND PROVIDE A NAME FOR THE OUTPUT.



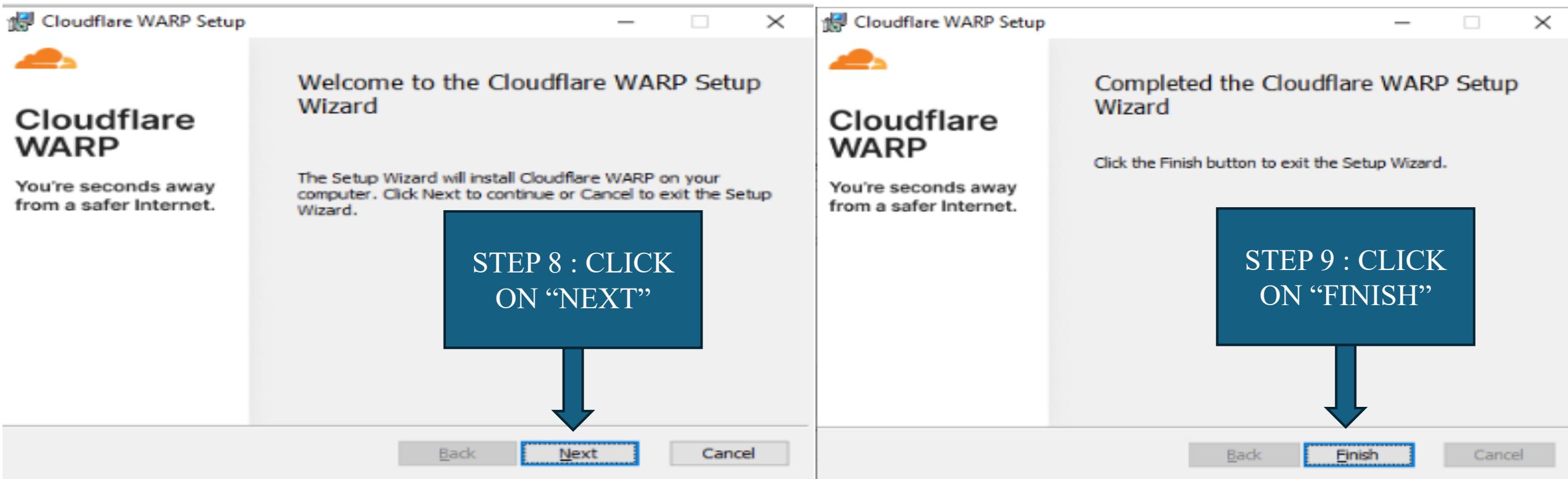
STEP 4 :CLICK ON "START LOCAL" TO BEGIN THE CAPTURE PROCESS AND SAVE THE MSI FILE.



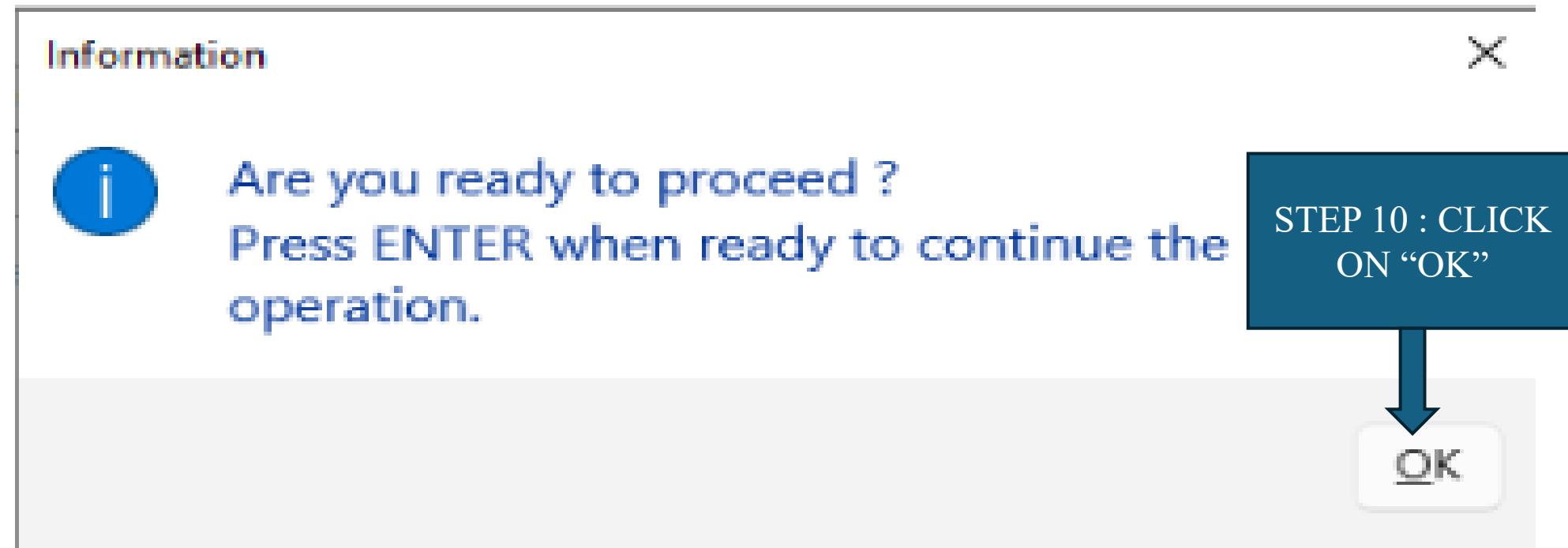
STEP 5 : A POP-UP WINDOW WILL APPEAR. CLICK "IGNORE" AND WAIT UNTIL THE REPACKAGING IS SUCCESSFUL.



STEP 6 : ANOTHER POP-UP TO INSTALL THE MSI WILL APPEAR. CLICK "NEXT" AND THEN "INSTALL."



STEP 7 : CLICK "OK" WHEN THE "ARE YOU READY TO PROCEED?" POP-UP APPEARS.



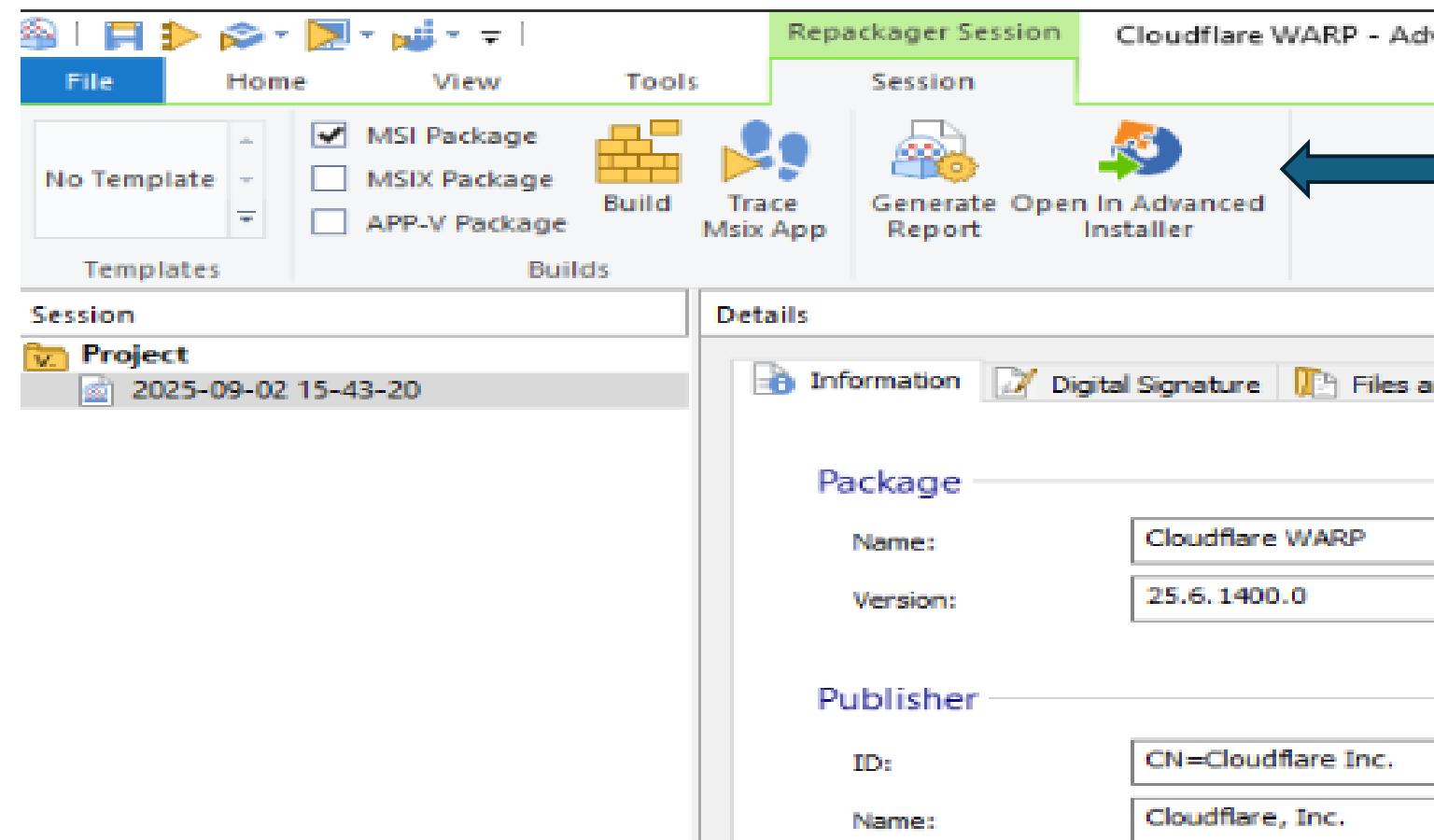
STEP 8 : WAIT UNTIL THE OPERATION IS COMPLETE AND SUCCESSFUL.

The screenshot shows a software interface with a sidebar labeled "Session" containing "Project" and a timestamp "2025-09-02 15:43:20". The main area is titled "Details" with tabs for "Information", "Digital Signature", "Files and Folders", "Registry", and "System". Under "Information", there is a "Package" section with fields for "Name" (Cloudflare WARP) and "Version" (25.6.1400.0). Below that is a "Publisher" section with fields for "ID" (CN=Cloudflare Inc.) and "Name" (Cloudflare, Inc.). At the bottom, a "Run Log" tab is open, showing a log of operations:

```
Process 9720 CPU usage = 0.000000%
Process 3696 CPU usage = 0.000000%
Process 9720 CPU usage = 0.000000%
Process 3696 CPU usage = 0.000000%
Process 9720 CPU usage = 0.000000%
Processing collected data from process monitor...
Capturing system state...
Analyzing system snapshots...
Generating data...
RepackagerDataFile: C:\Users\Administrator\Desktop\Soora\0
Operation completed successfully.
Operation completed successfully.
```

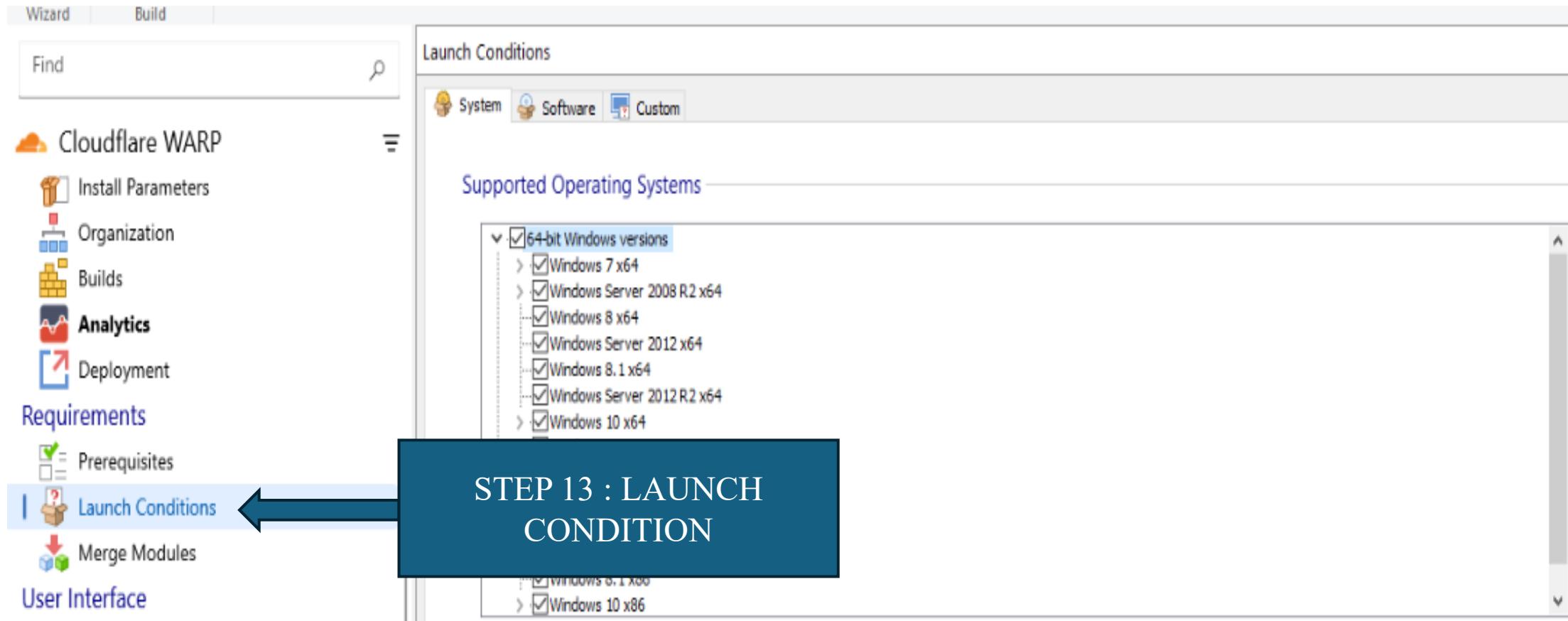
A large blue callout box with white text is overlaid on the log window, containing the text "STEP 11 : WAIT TILL ITS COMPLETE". A blue arrow points from the bottom of this callout box towards the "Operation completed successfully." entry in the log.

STEP 9 : CLICK ON OPEN ADVANCED INSTALLER AND IMPORT THE REPACKAGED RESULTS. THIS WILL IMPORT THE FILES AND FOLDERS OF THE APPLICATION.

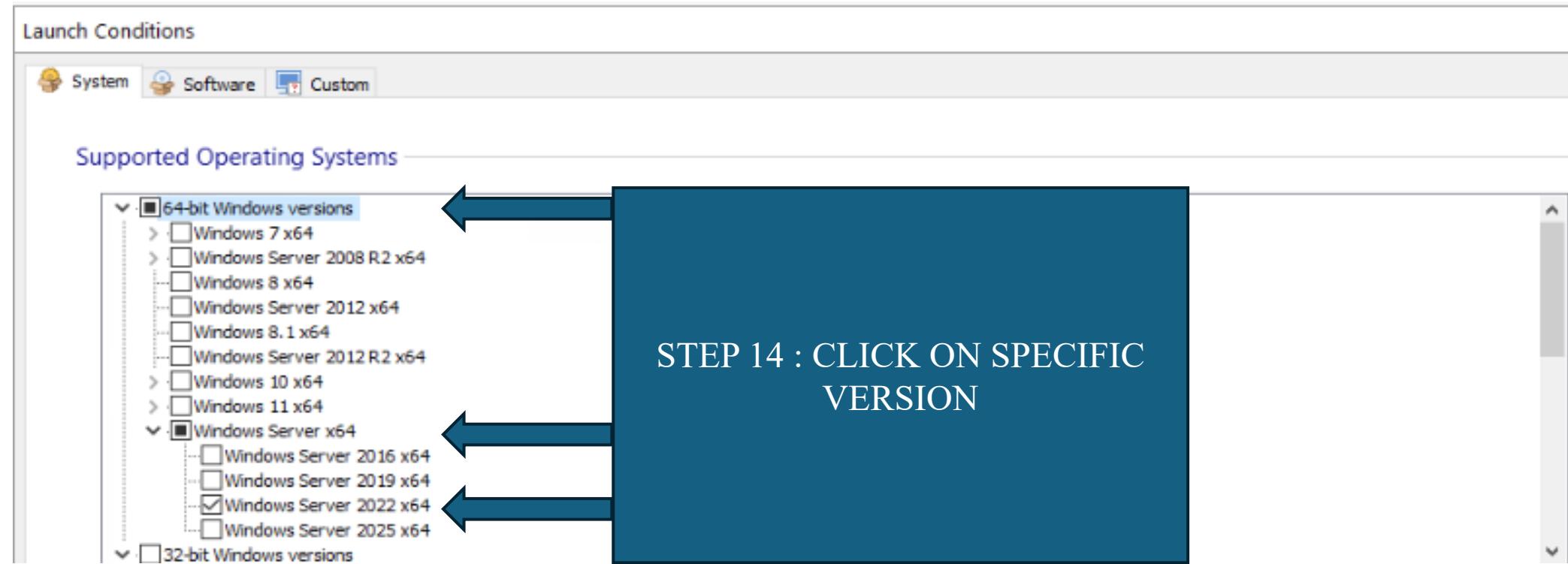


STEP 12 : CLICK AND OPEN ADVANCE D INSTALLER

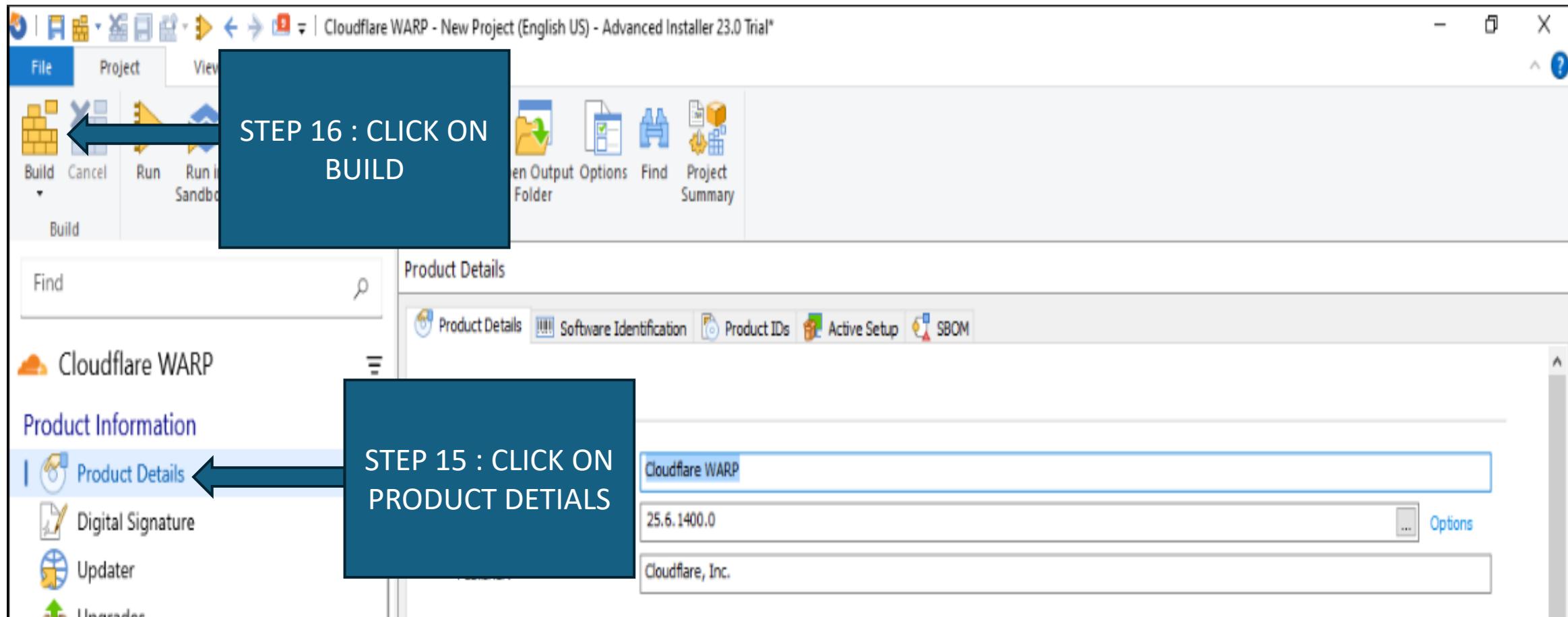
2. CONFIGURING THE LAUNCH CONDITION: STEP 10 : SCROLL DOWN TO AND CLICK "LAUNCH CONDITIONS."



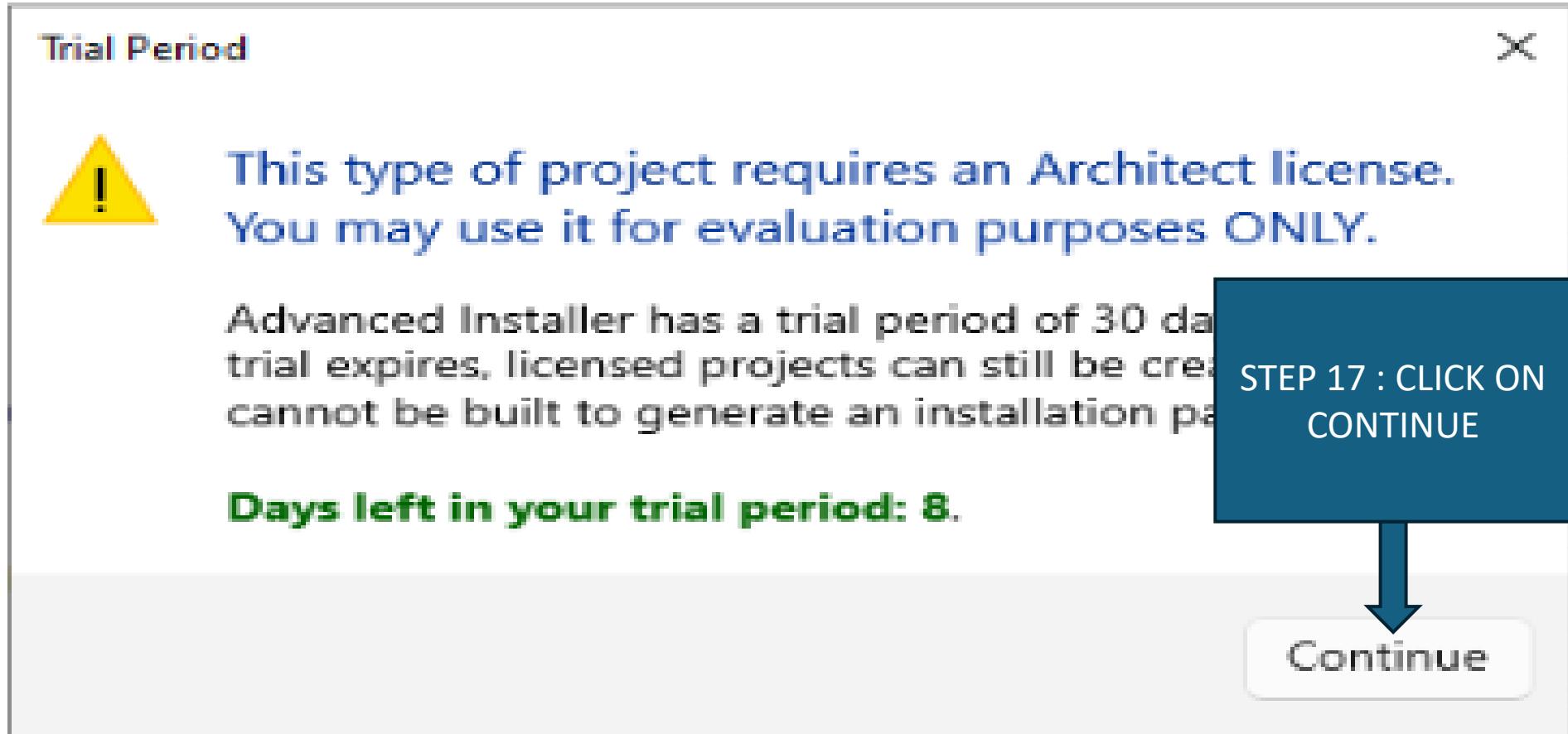
STEP 11 : UNDER THE SYSTEM SOFTWARE CATEGORY, UNSELECT THE DEFAULT "ANY WINDOWS VERSION" OPTION SELECT THE SPECIFIC OS VERSIONS YOU WANT TO ALLOW, SUCH AS WINDOWS SERVER 2022 X64 AND WINDOWS SERVER X64.



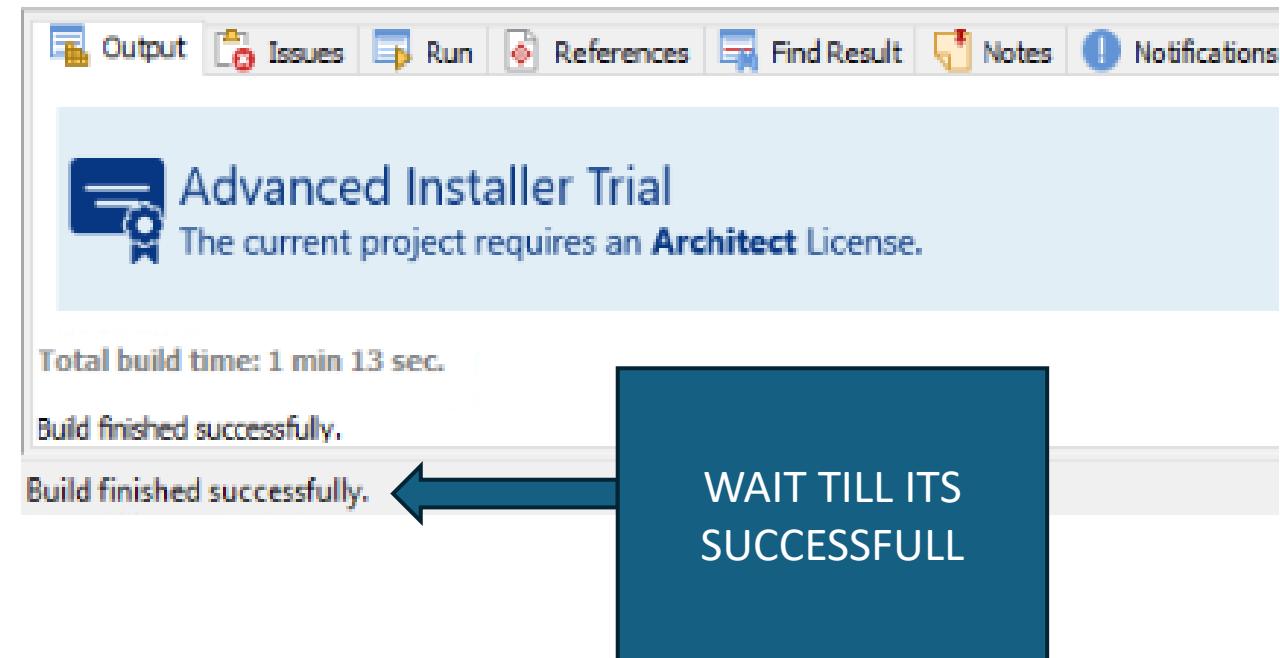
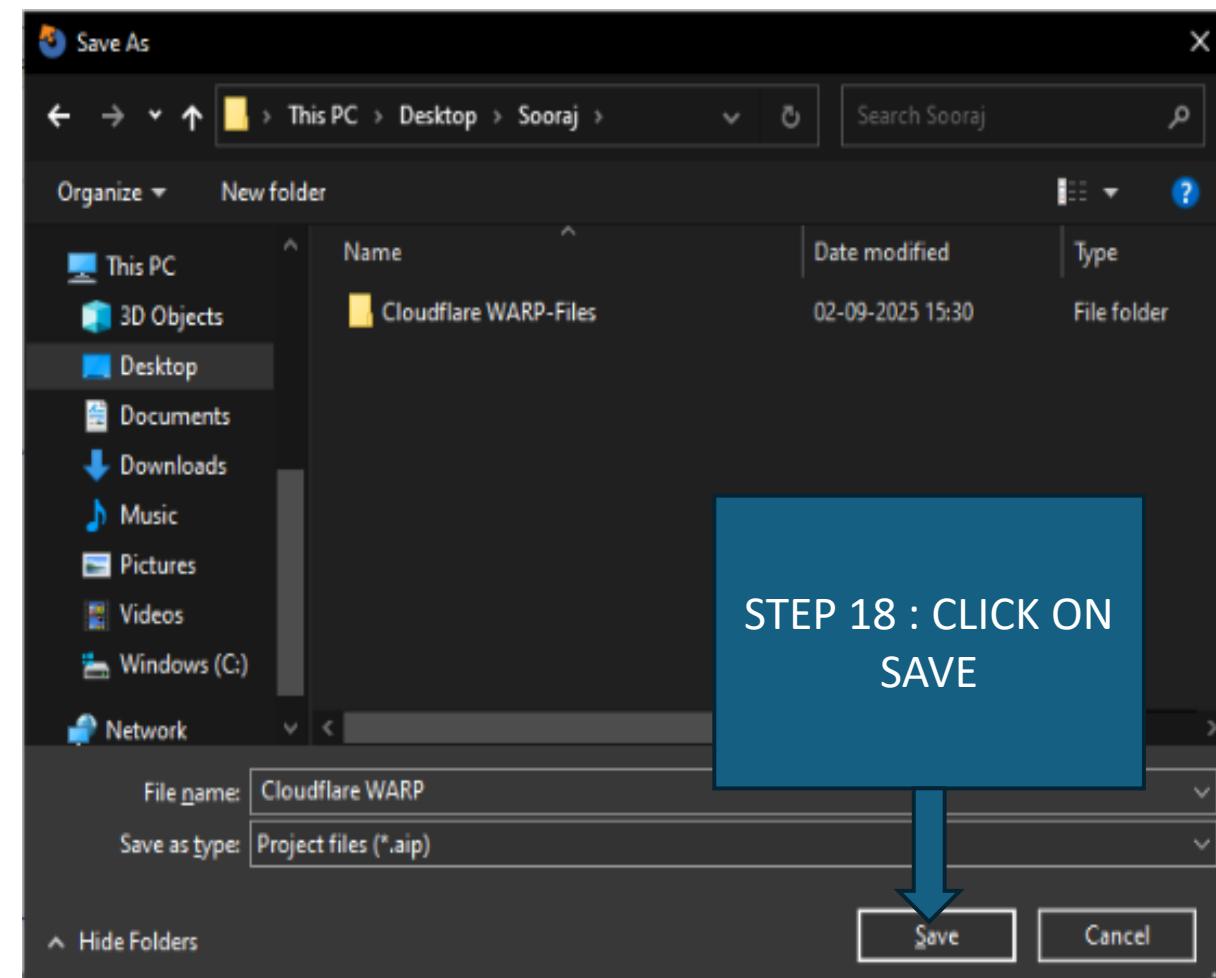
STEP 12 : GO TO "PRODUCT DETAILS" AND THEN CLICK "BUILD."



STEP 13 : A POP-UP WILL APPEAR. CLICK "CONTINUE."



STEP 14 : SAVE THE FINAL MSI FILE IN YOUR FOLDER.



STEP 15 : UNINSTALL THE MSI FILE YOU JUST BUILT.

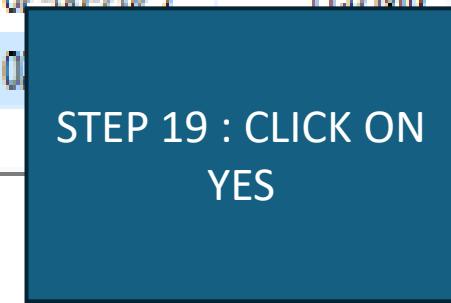
Organize Uninstall Repair

| Name | Publisher | Installed On | Size | Version |
|-----------------------------|-----------------------|--------------|---------|-------------|
| Advanced Installer 23.0 | Caphyon | 31-08-2025 | 590 MB | 23.0 |
| Browser for SQL Server 2019 | Microsoft Corporation | 02-09-2025 | 11.0 MB | 15.0.2000.5 |
| Cloudflare WARP | Cloudflare, Inc. | 0 | | 25.6.1400.0 |

Programs and Features

Are you sure you want to uninstall Cloudflare WARP?

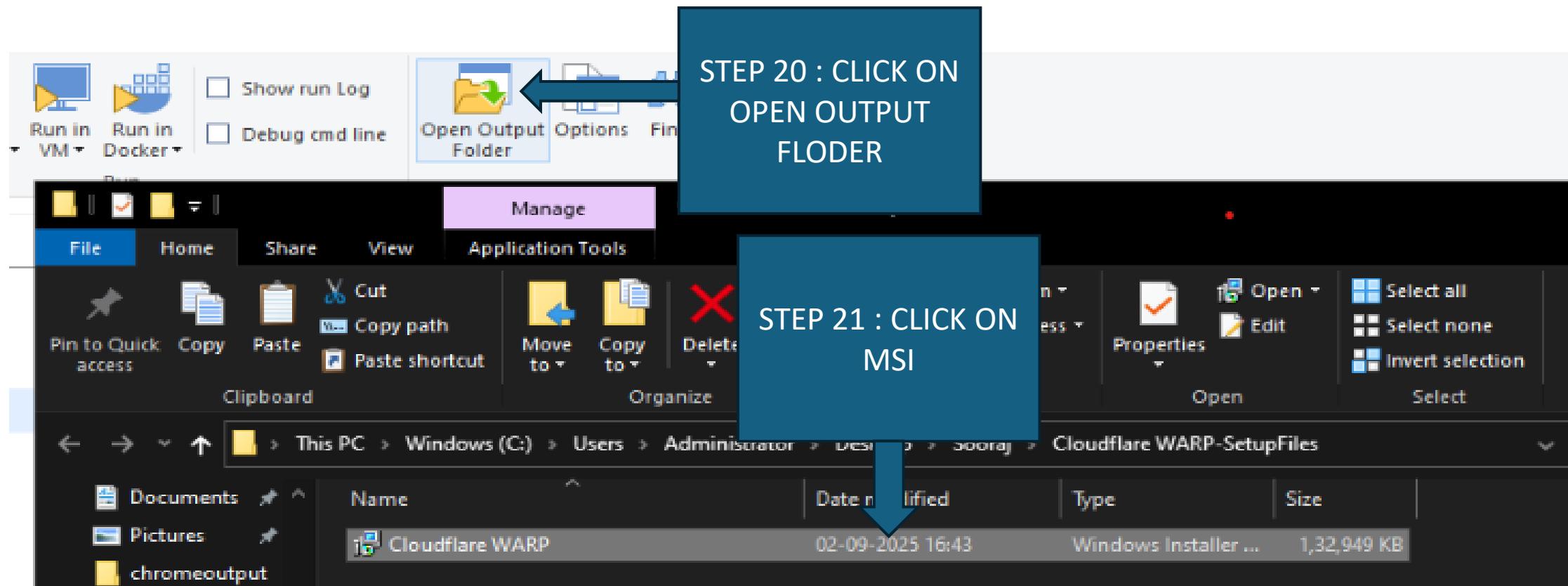
In the future, do not show me this dialog box

 STEP 19 : CLICK ON YES

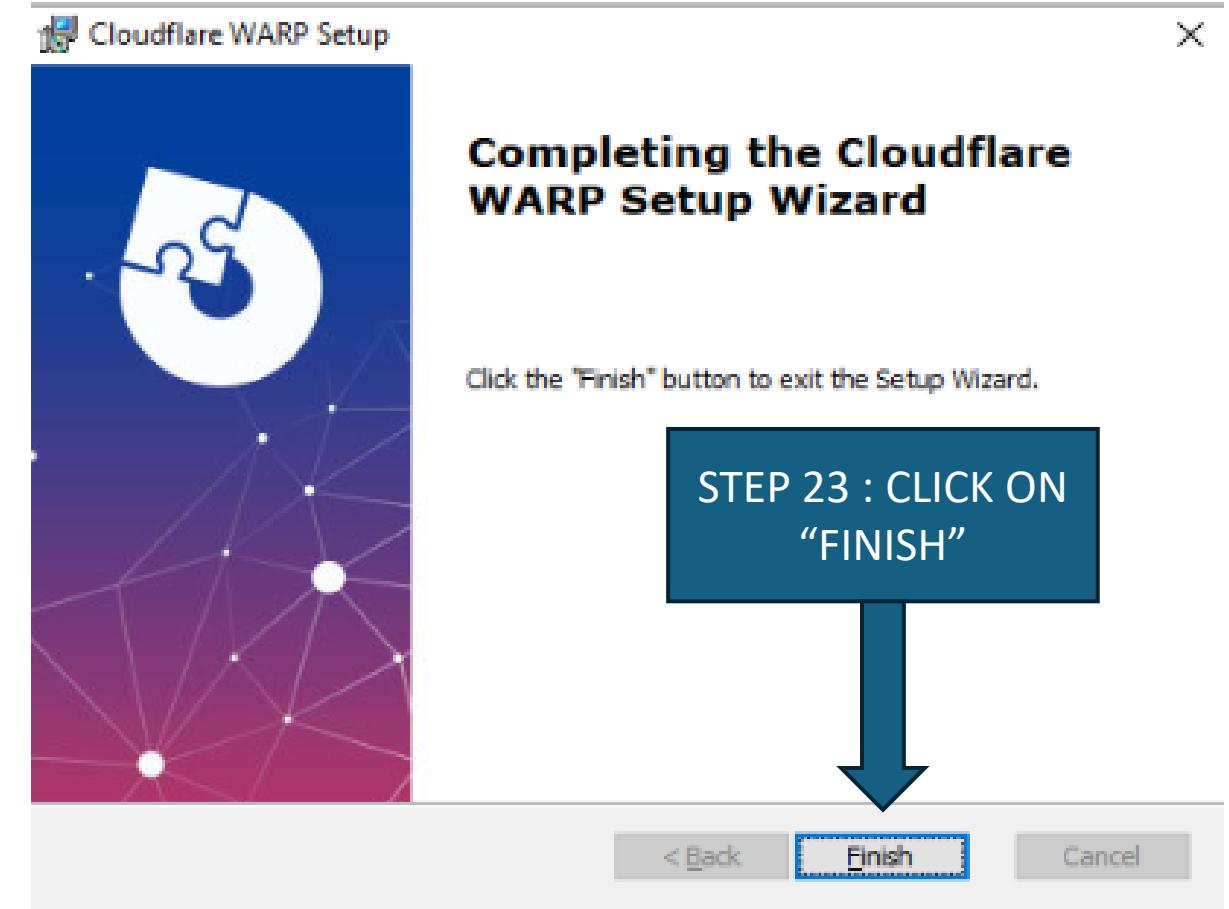
 Yes  No

3. TESTING THE INSTALLER:

STEP 16 : NAVIGATE TO THE OUTPUT FOLDER AND DOUBLE-CLICK THE NEWLY BUILT MSI FILE.



STEP 17 : AN "INSTALLATION POP-UP" WILL APPEAR. CLICK "NEXT" AND "INSTALL" UNTIL IT'S DONE, THEN CLICK "FINISH."



STEP 18 : CHECK THE "CONTROL PANEL" TO CONFIRM THAT THE SOFTWARE IS INSTALLED.

| Name | Publisher | Installed On | Size | Version |
|---|-------------------------------|--------------|----------|------------------|
| Advanced Installer 23.0 | Caphyon | 31-08-2025 | 590 MB | 23.0 |
| Browser for SQL Server 2019 | Microsoft Corporation | 02-08-2025 | 11.0 MB | 15.0.2000.5 |
| Cloudflare WARP | Cloudflare, Inc. | 02-09-2025 | 335 MB | 25.6.1400.0 |
| Git | The Git Development Community | 05-03-2025 | 347 MB | 2.48.1 |
| Google Chrome | Google LLC | 30-08-2025 | 139.0 MB | 139.0.7258.155 |
| Microsoft .NET Framework 4.8.1 SDK | Microsoft Corporation | 02-08-2025 | 20.2 MB | 4.8.09032 |
| Microsoft .NET Framework 4.8.1 Targeting Pack | Microsoft Corporation | 02-08-2025 | 42.2 MB | 4.8.09032 |
| Console | Microsoft Corporation | 02-08-2025 | 177 MB | 5.2503.1003.1000 |
| Primary Site Setup | Microsoft Corporation | 02-08-2025 | | 5.00.9133.1000 |
| | Microsoft Corporation | 30-08-2025 | | 139.0.3405.125 |
| | Microsoft Corporation | 02-08-2025 | 12.1 MB | 2.3.28307 |
| Server | Microsoft Corporation | 02-08-2025 | 7.27 MB | 17.10.6.1 |
| Server | Microsoft Corporation | 02-08-2025 | 15.6 MB | 18.5.1.1 |
| Microsoft Office Professional Plus 2019 - en-us | Microsoft Corporation | 15-08-2025 | | 16.0.10417.20042 |
| Microsoft OLE DB Driver 19 for SQL Server | Microsoft Corporation | 02-08-2025 | 8.30 MB | 19.3.5.0 |
| Microsoft OLE DB Driver for SQL Server | Microsoft Corporation | 02-08-2025 | 11.3 MB | 18.7.4.0 |
| Microsoft SQL Server 2012 Native Client | Microsoft Corporation | 02-08-2025 | 9.71 MB | 11.4.7462.6 |

STEP 24 : MSI
INSTALLED



Cloudflare, Inc. Product version: 25.6.1400.0

Size: 335 MB

Comments: This installer database contains the logic and data required to install Cloudflare W...

STEP 19: TO TEST LAUNCH CONDITION, GO TO THE "LAUNCH CONDITIONS" SECTION AGAIN SELECT A RANDOM WINDOWS VERSION THAT IS NOT ON YOUR CURRENT SYSTEM.

The screenshot shows the Cloudflare WARP interface. On the left, there's a sidebar with icons for Cloudflare WARP, Analytics, Deployment, Requirements, Prerequisites, Launch Conditions (which is highlighted with a blue arrow and labeled 'STEP 25 : CLICK ON LAUNCH CONDITION'), and Metrics Modules. Below these are sections for User Interface and Themes. The main area is titled 'Launch Conditions' with tabs for System, Software, and Custom. Under 'Supported Operating Systems', there are two expandable sections: '64-bit Windows versions' and '32-bit Windows versions'. Under '64-bit Windows versions', several options are listed, including Windows 7 x64, Windows Server 2008 R2 x64, Windows 8 x64 (which is checked), Windows Server 2012 x64, Windows 8.1 x64, Windows Server 2012 R2 x64, Windows 10 x64, Windows 11 x64, and Windows Server x64. Under '32-bit Windows versions', options include Windows 7 x86, Windows 8 x86, Windows 8.1 x86, and Windows 10 x86. A large blue callout box on the right says 'STEP 26 : CLICK ON RANDOM VERSION' with an arrow pointing to the checked checkbox in the 'Windows 8 x64' row.

Find

Cloudflare WARP

Analytics

Deployment

Requirements

Prerequisites

Launch Conditions

Metric Modules

User Interface

Themes

Launch Conditions

System Software Custom

Supported Operating Systems

64-bit Windows versions

- Windows 7 x64
- Windows Server 2008 R2 x64
- Windows 8 x64
- Windows Server 2012 x64
- Windows 8.1 x64
- Windows Server 2012 R2 x64
- Windows 10 x64
- Windows 11 x64
- Windows Server x64

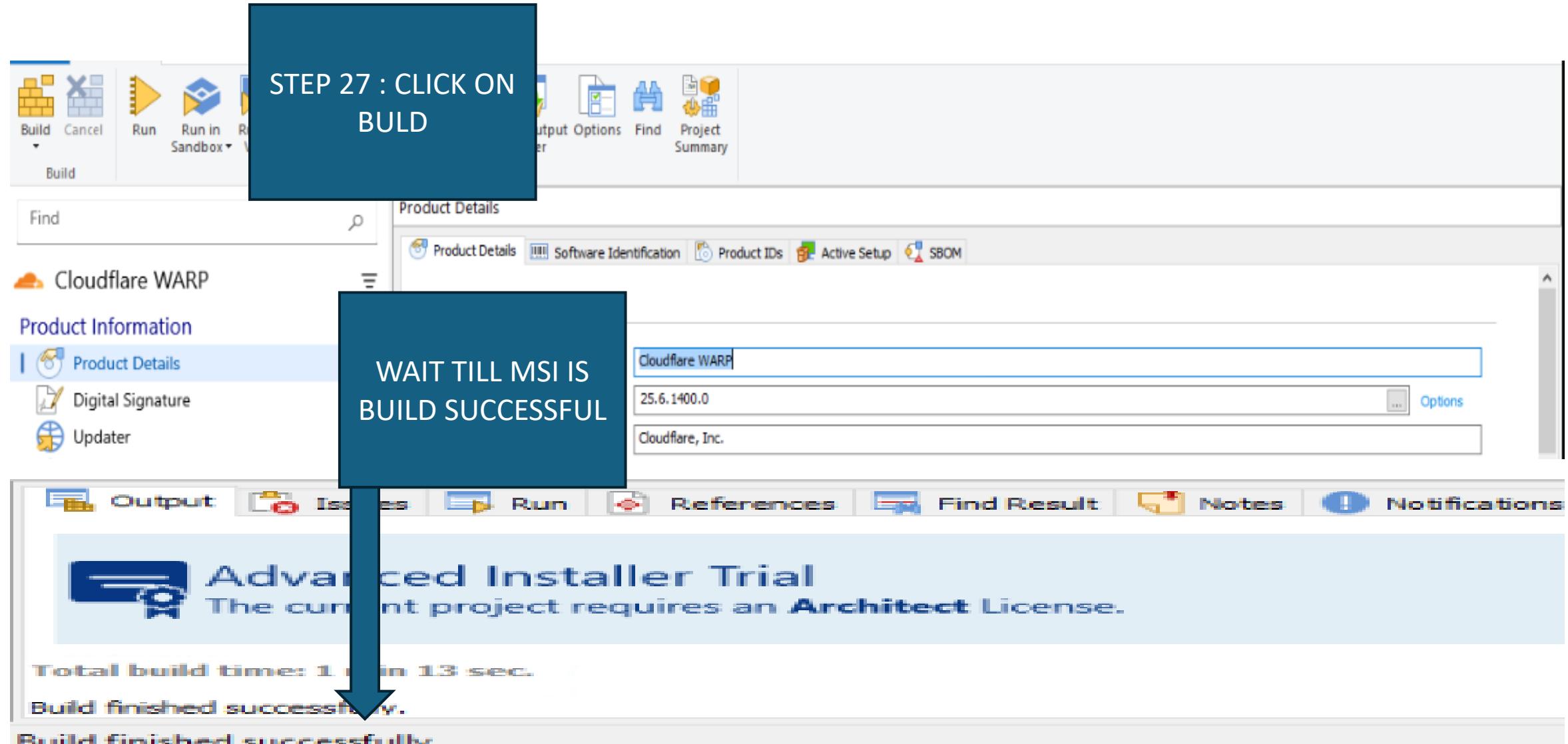
32-bit Windows versions

- Windows 7 x86
- Windows 8 x86
- Windows 8.1 x86
- Windows 10 x86

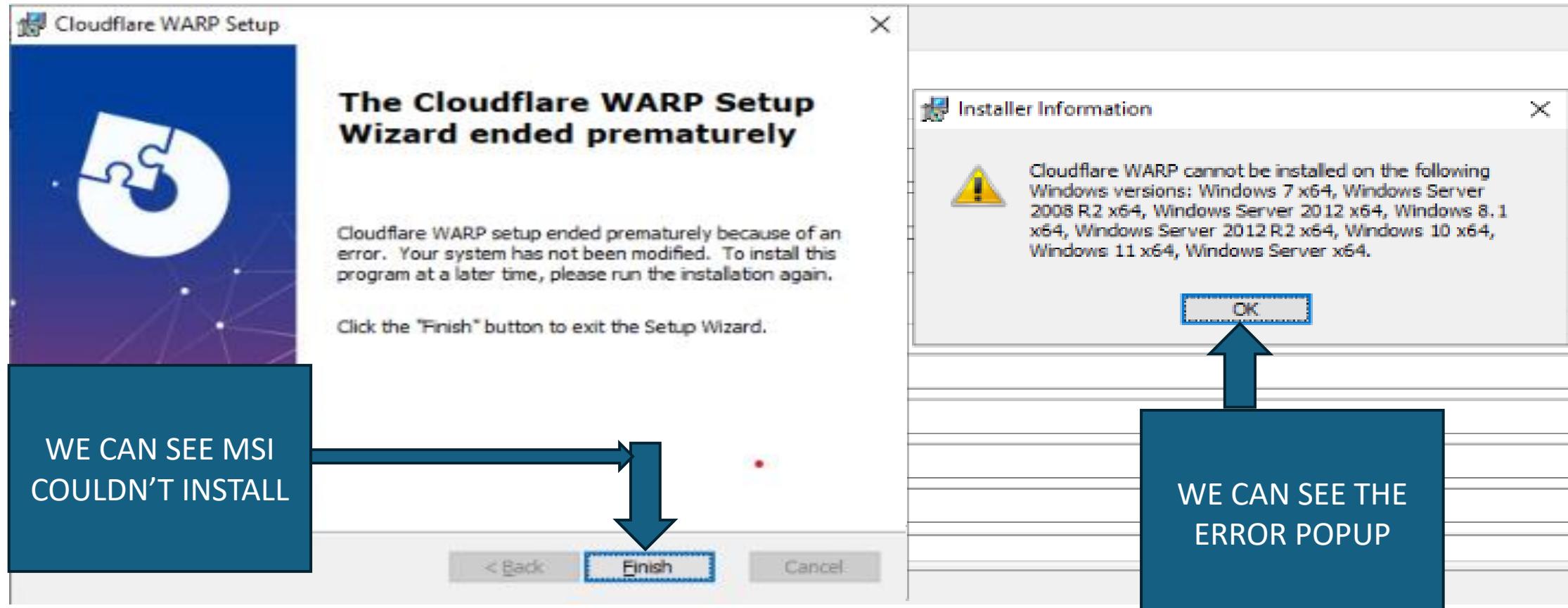
STEP 25 : CLICK ON LAUNCH CONDITION

STEP 26 : CLICK ON RANDOM VERSION

STEP 20 : GO TO "PRODUCT DETAILS" AND THEN "BUILD."



STEP 21 : CLICK ON THE MSI FILE YOU JUST BUILT. AN ERROR POP-UP MESSAGE WILL APPEAR, STATING THAT THE APPLICATION CANNOT BE INSTALLED. THIS MEANS YOUR PROJECT AND THE LAUNCH CONDITION ARE SUCCESSFUL.



CONCLUSION

This project used application repackaging to create a smart installer with a launch condition, preventing installation on unsupported operating systems and ensuring a reliable deployment.

Sources and references

<https://www.advancedinstaller.com/user-guide/>

<https://learn.microsoft.com/en-us/windows/win32/msi/launch-conditions>

THANK YOU