

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.

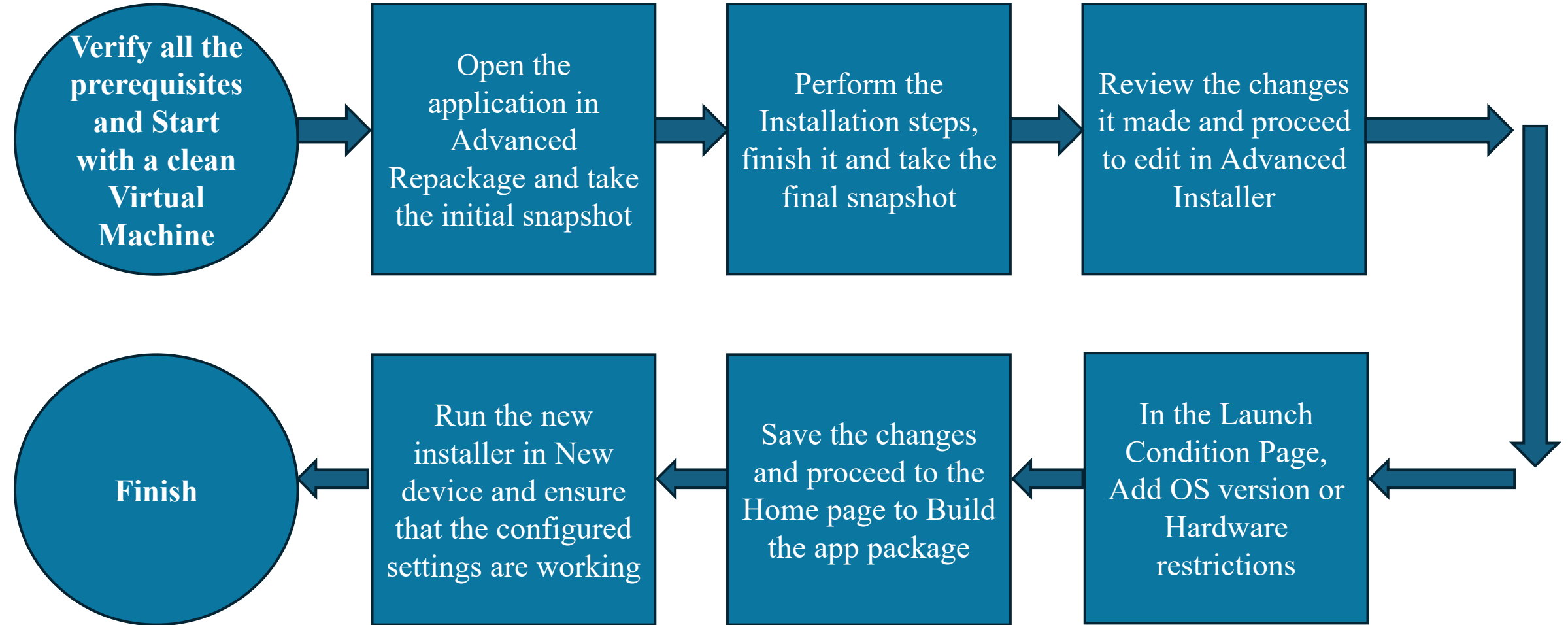
RAM: You need at least 1 GB of RAM to run the application.

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.

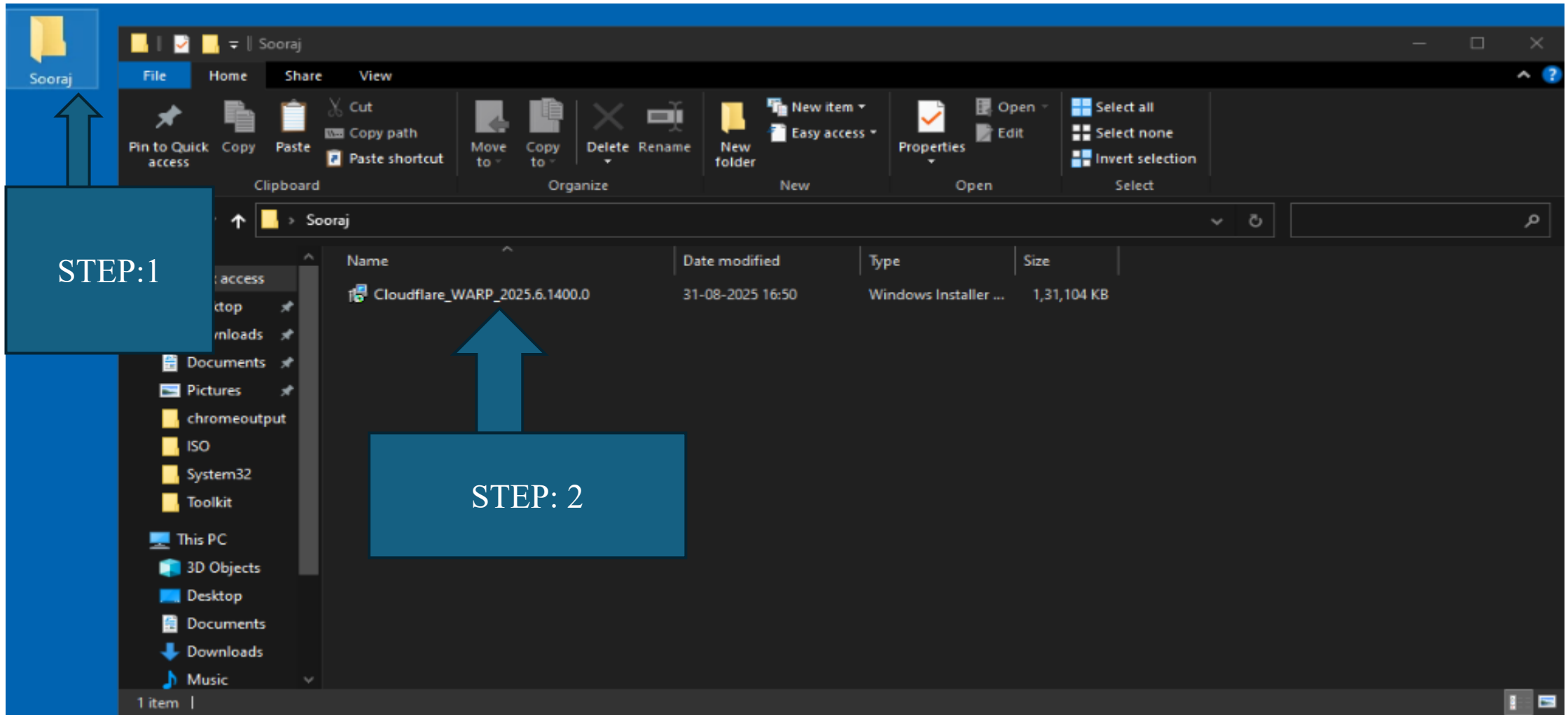
Operating System: Advanced Installer requires Windows 10 or newer to run.

Workflow Diagram

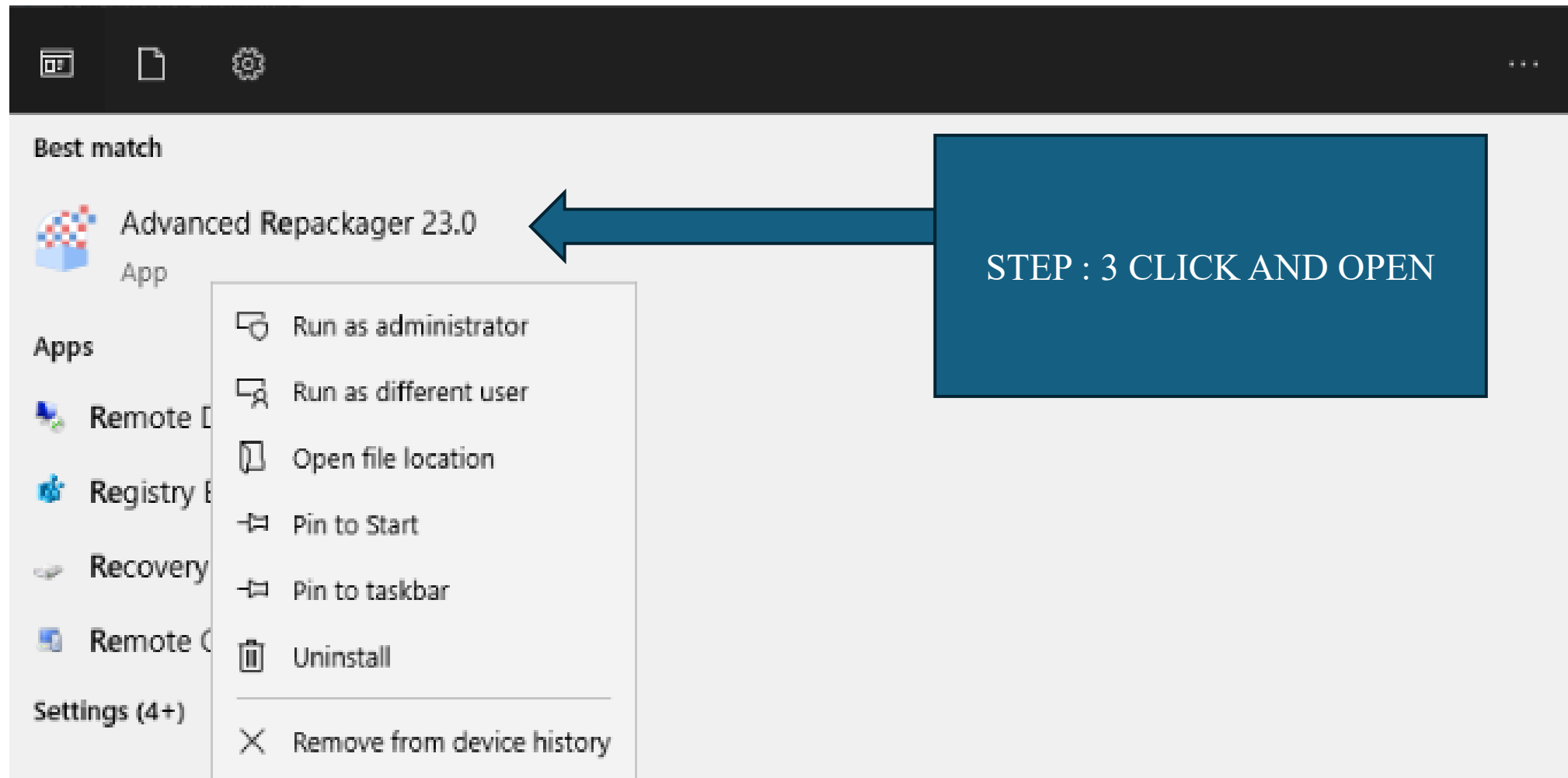


1. INITIAL SETUP AND REPACKAGING:

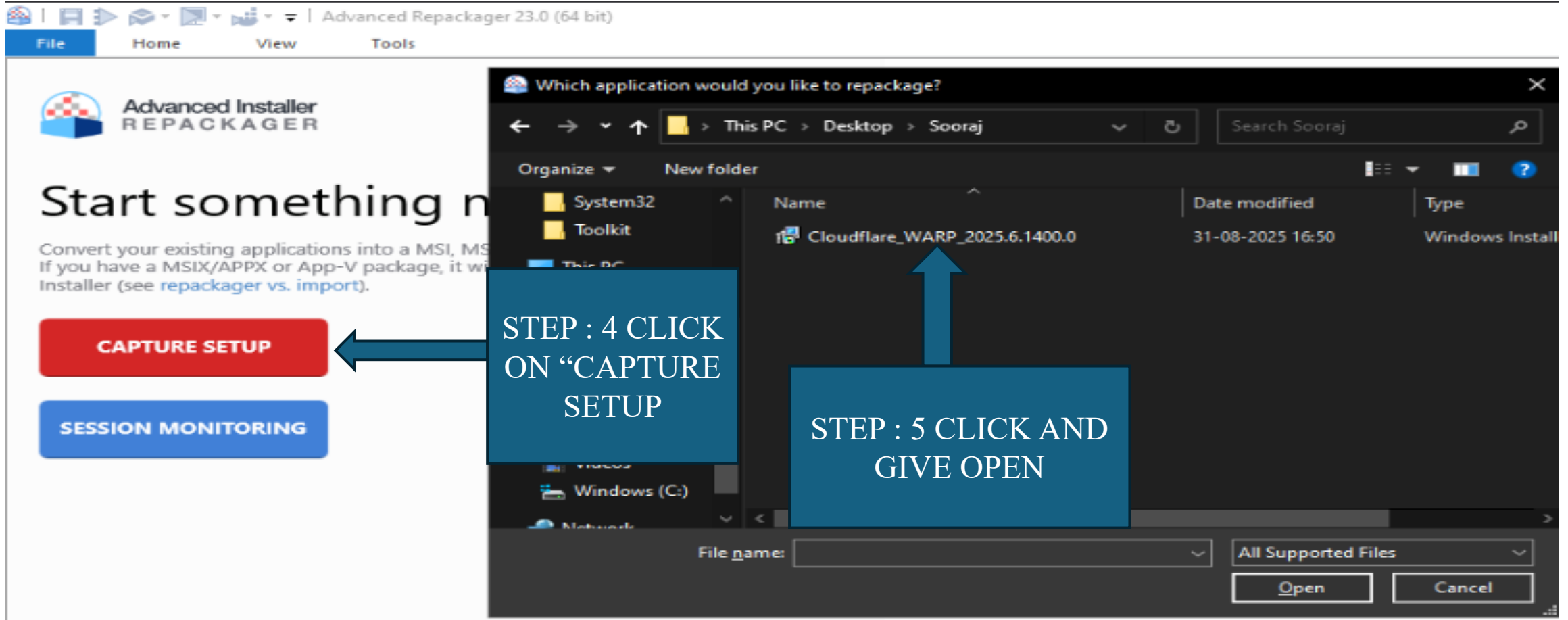
STEP 1: CREATE A FOLDER TO SAVE YOUR REPACKAGED MSI FILE.



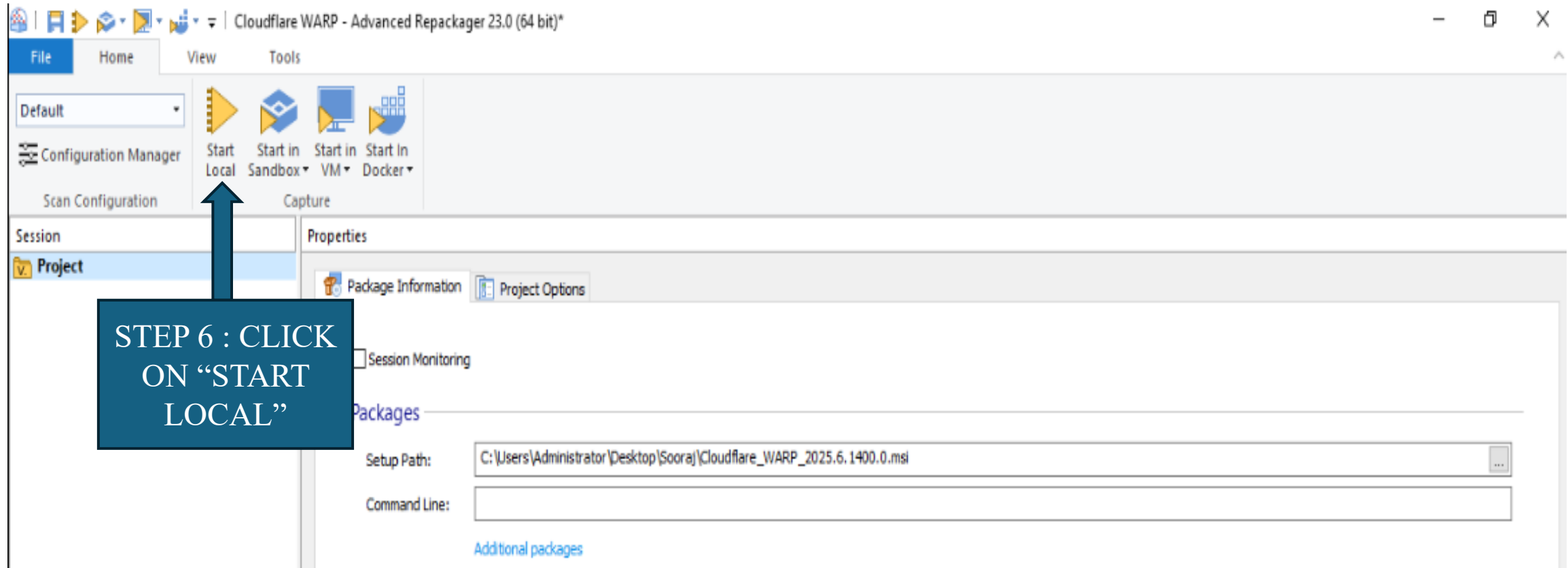
STEP 2:OPEN THE APPLICATION REPACKAGING TOOL.



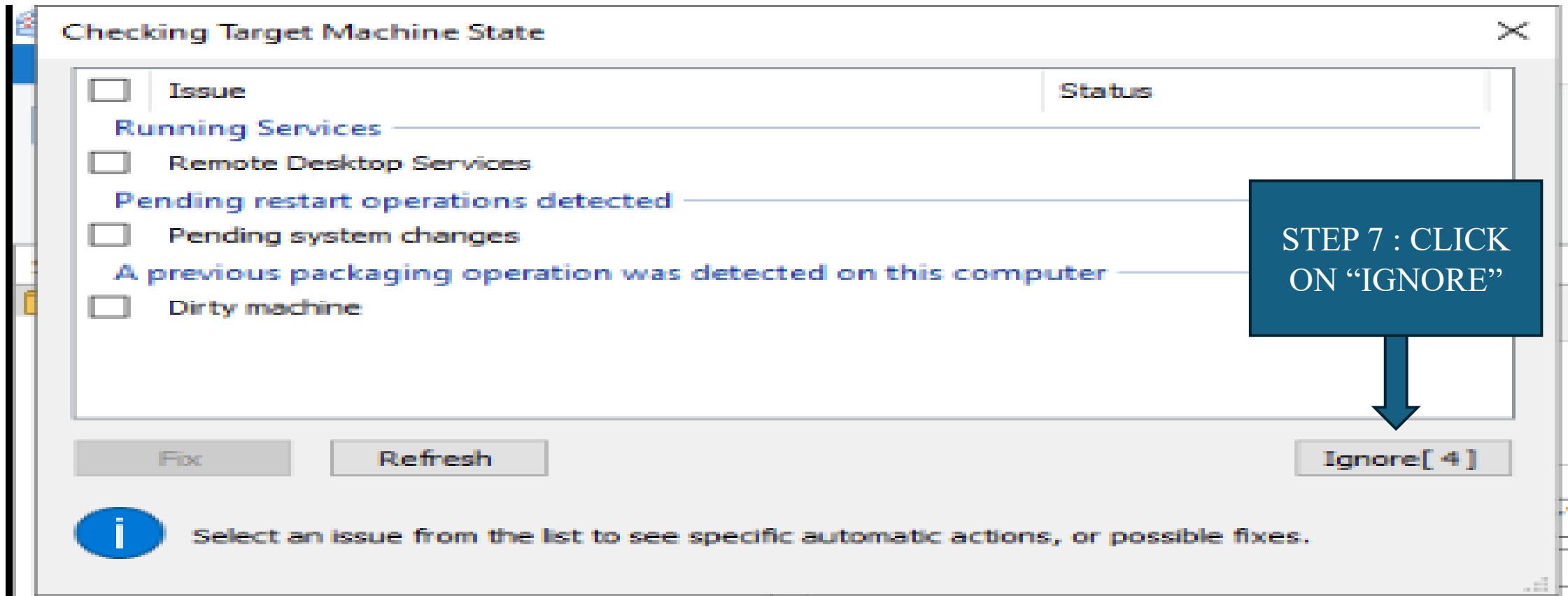
STEP 3 :CLICK ON "CAPTURE SETUP." SELECT THE MSI FILE YOU WANT TO REPACKAGE AND PROVIDE A NAME FOR THE OUTPUT.



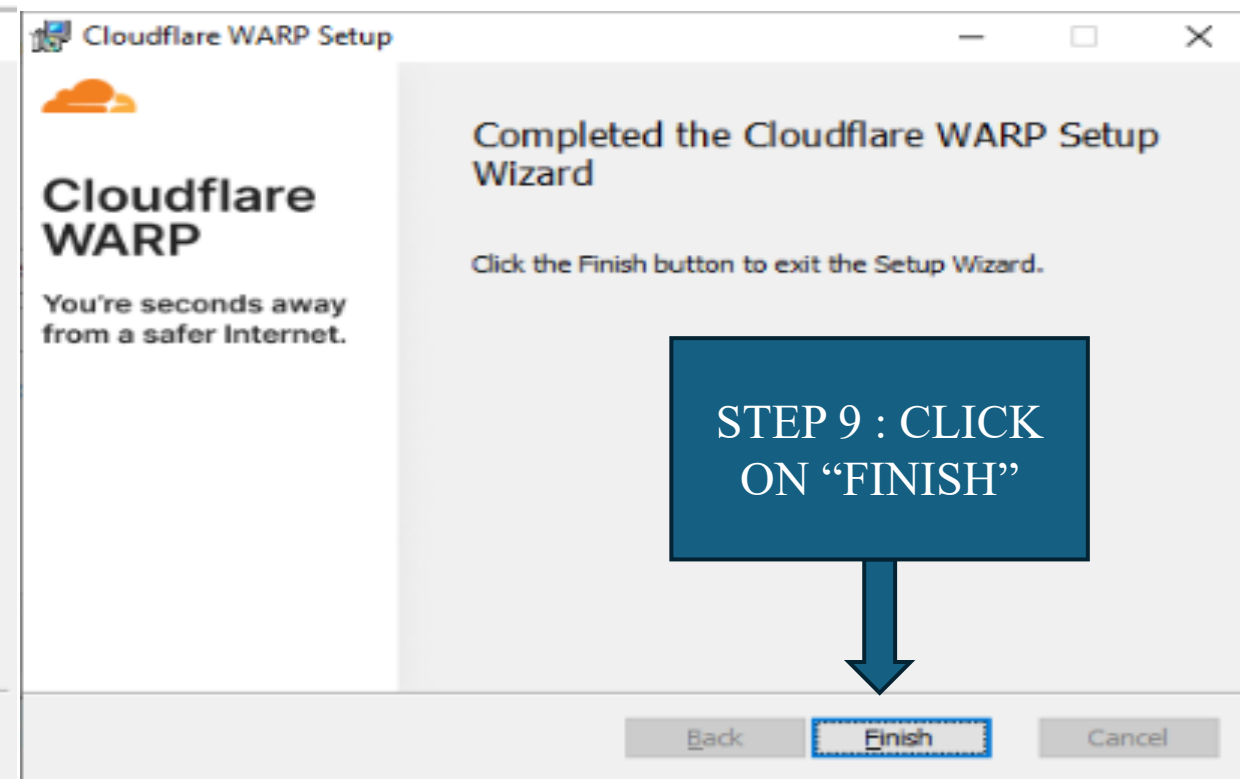
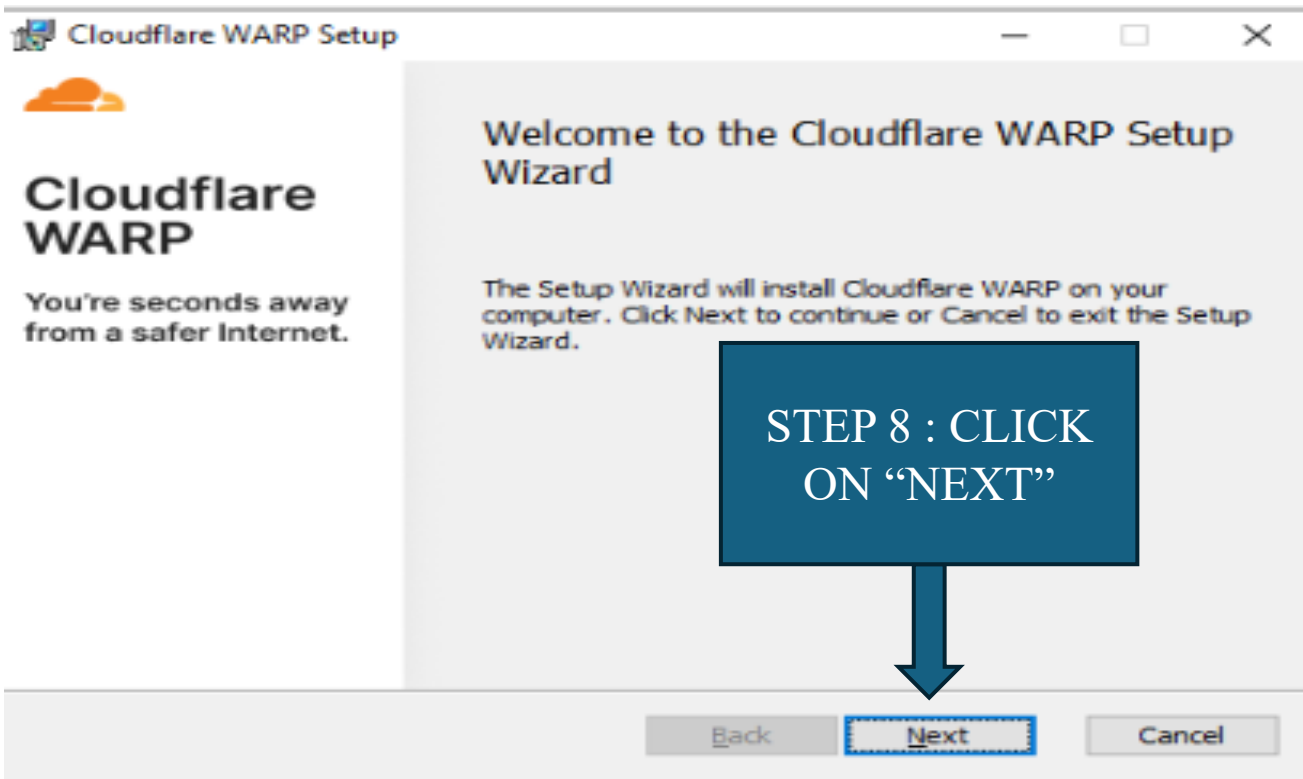
STEP 4 :CLICK ON "START LOCAL" TO BEGIN THE CAPTURE PROCESS AND SAVE THE MSI FILE.



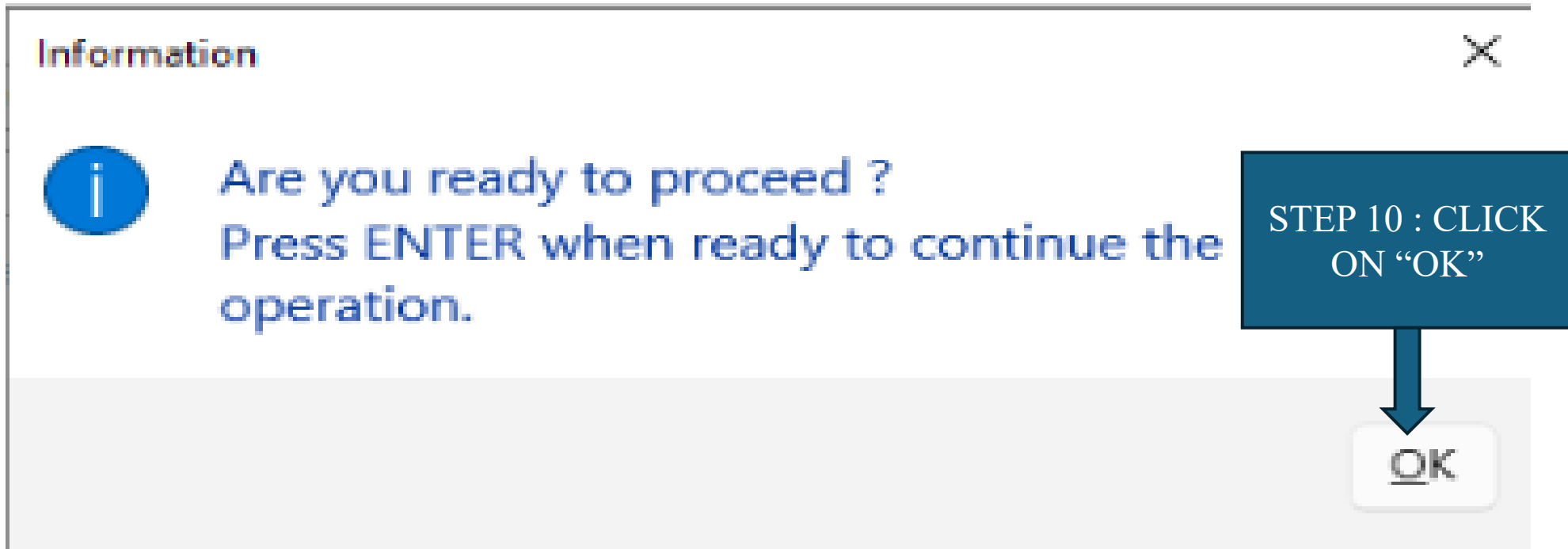
STEP 5 : A POP-UP WINDOW WILL APPEAR. CLICK "IGNORE" AND WAIT UNTIL THE REPACKAGING IS SUCCESSFUL.



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 displays a software installation window with two main panes. The left pane, titled 'Session', shows a folder icon and the text 'Project' followed by the timestamp '2025-09-02 15-43-20'. The right pane, titled 'Details', contains tabs for 'Information', 'Digital Signature', 'Files and Folders', 'Registry', and 'System'. The 'Information' tab is active, showing the following details:

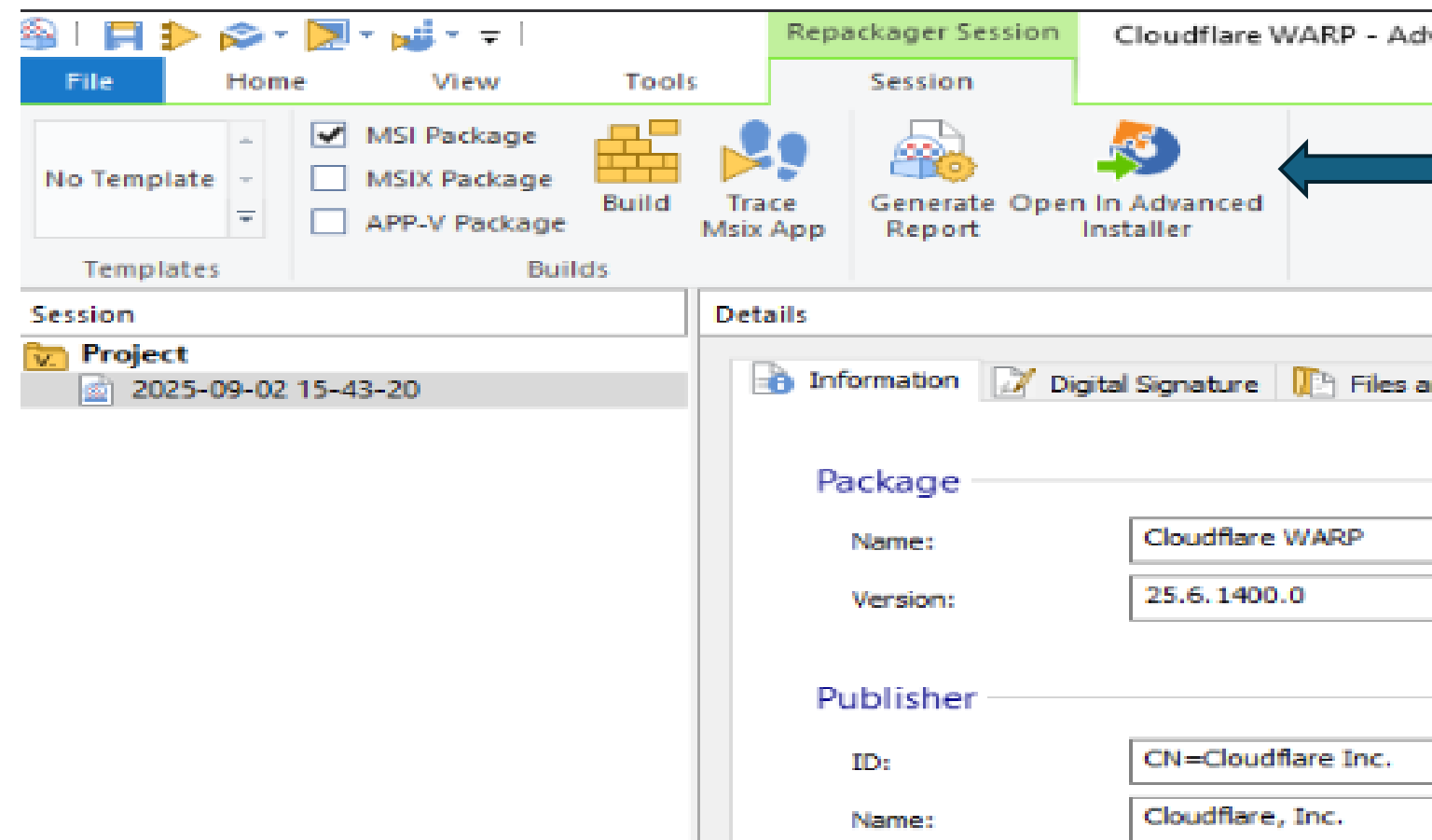
- Package**
 - Name: Cloudflare WARP
 - Version: 25.6.1400.0
- Publisher**
 - ID: CN=Cloudflare Inc.
 - Name: Cloudflare, Inc.

At the bottom of the window, there is a 'Run Log' tab and a 'Notes' tab. The 'Run Log' tab is active, displaying the following log entries:

```
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\Sooraj\Q  
Operation completed successfully.  
Operation completed successfully.
```

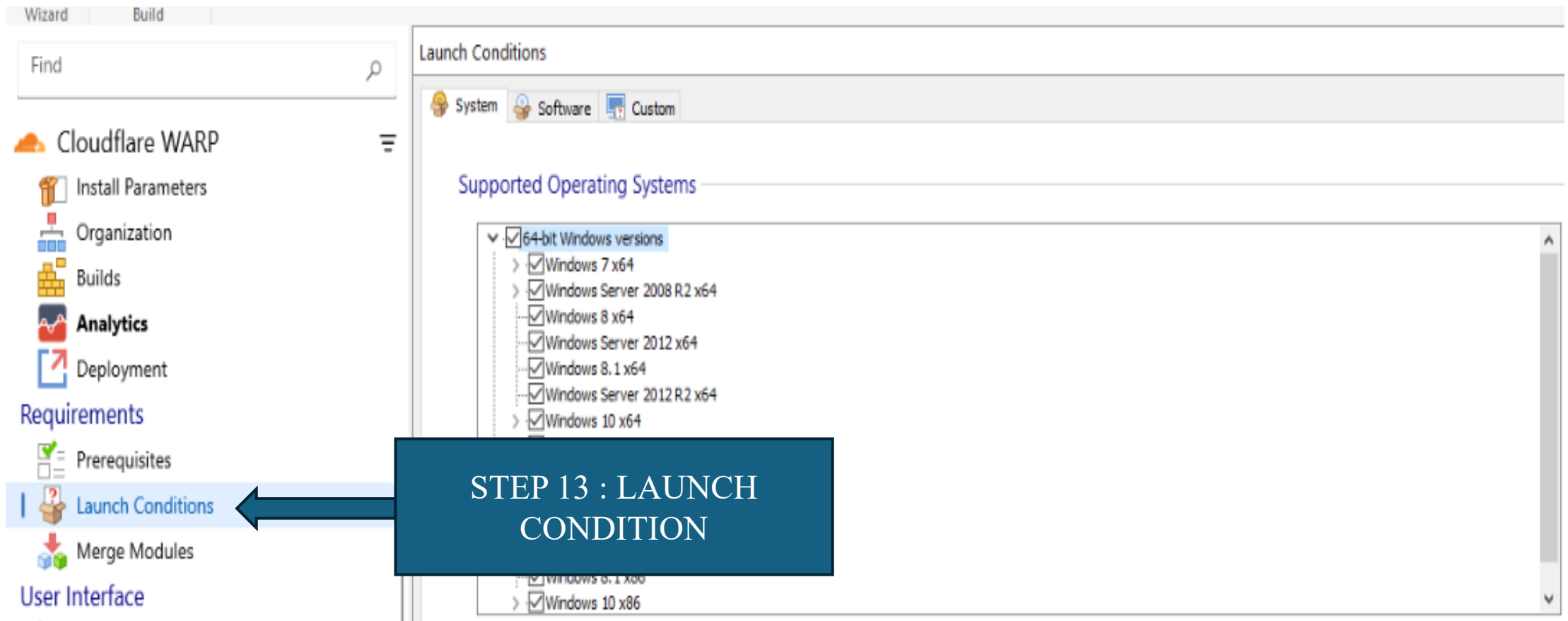
A blue callout box with the text 'STEP 11 : WAIT TILL ITS COMPLETE' is positioned over the log, with a blue arrow pointing to the final 'Operation completed successfully.' entry. A green progress bar is visible at the bottom of the window.

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

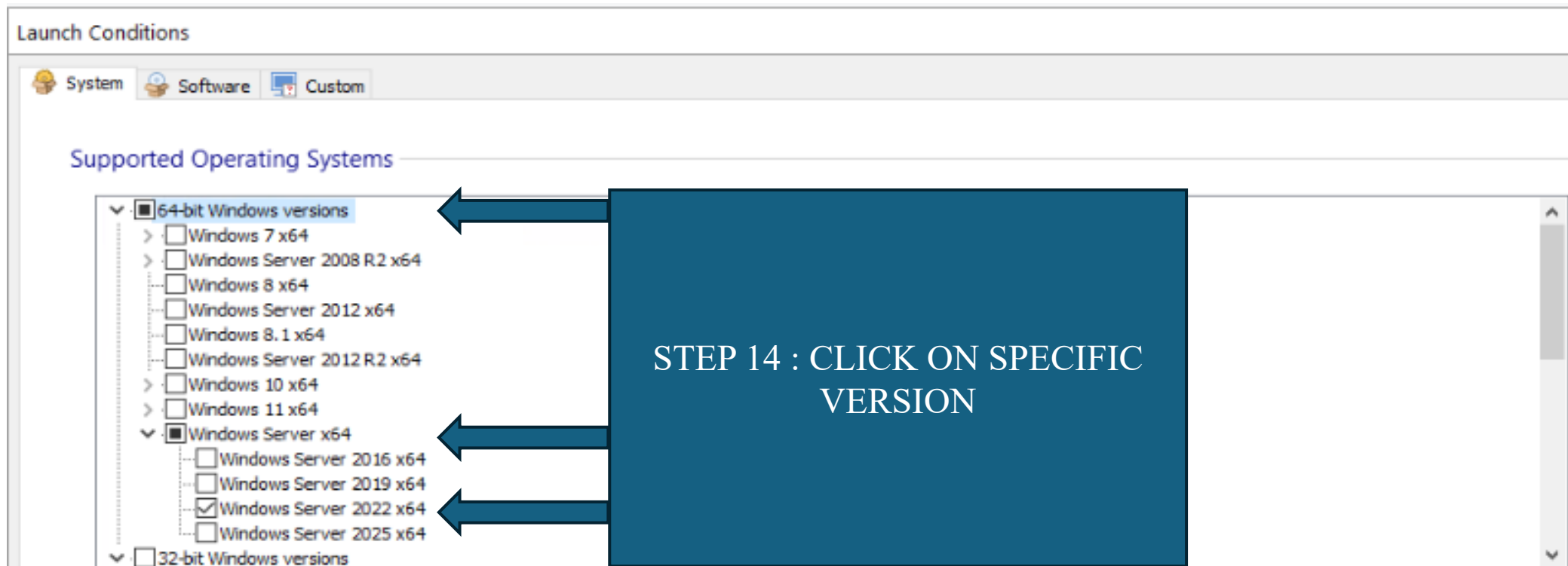


STEP 12 : CLICK AND OPEN
ADVANCED INSTALLER

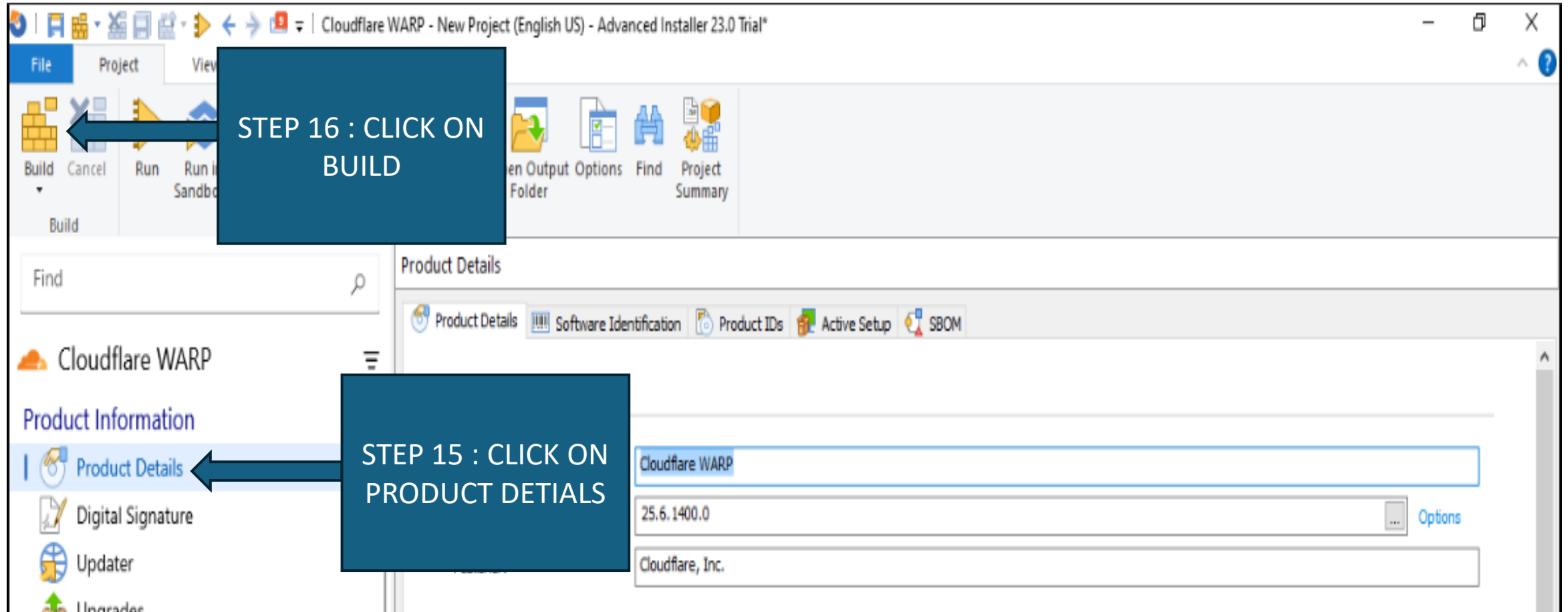
2. CONFIGURING THE LAUNCH CONDITION: STEP 10 : SCROLL DOWN TO AND CLICK "LAUNCH CONDITIONS."



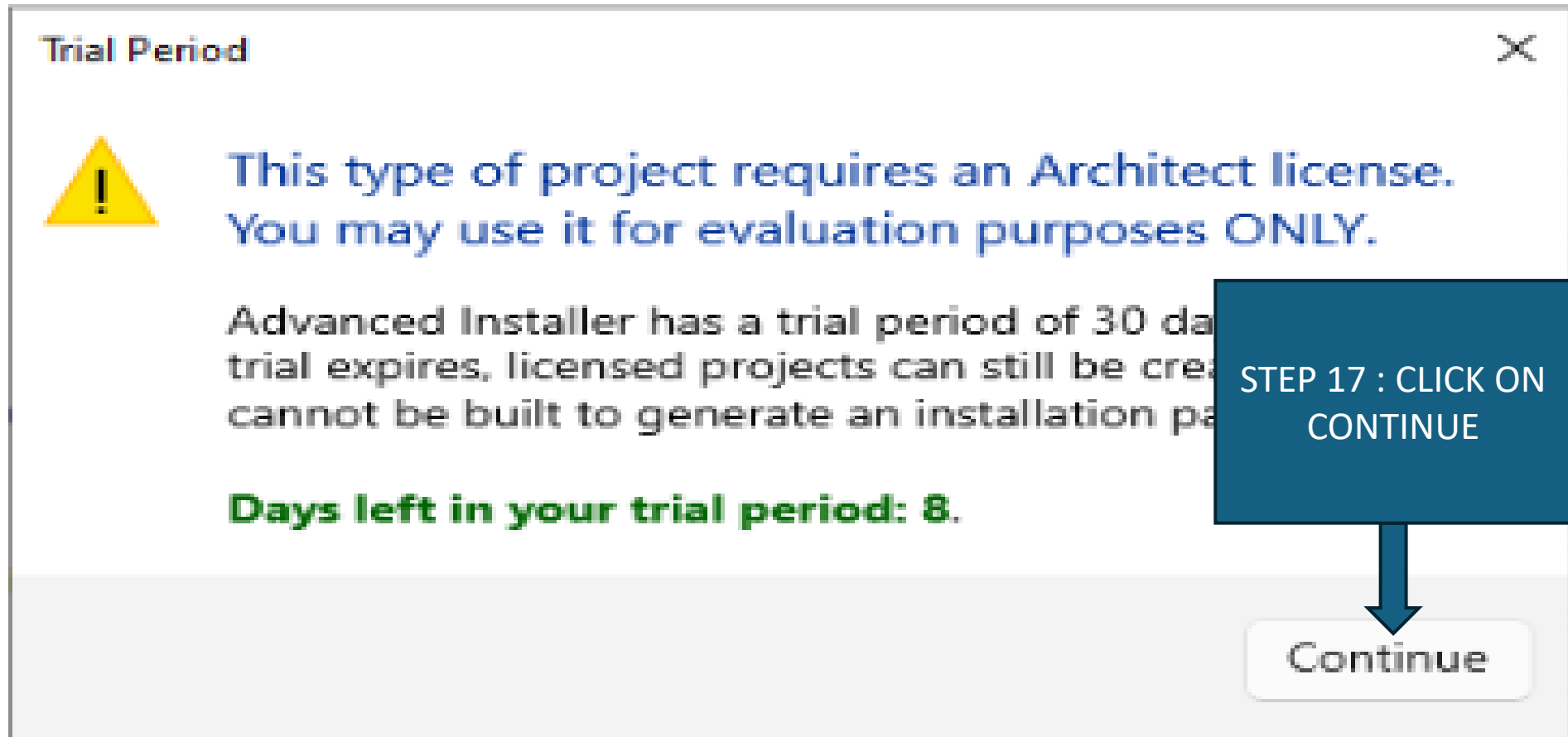
STEP 11 : UNDER THE SYSTEM SOFTWARE CATEGORY, UNSELECT THE DEFAULT "ANY WINDOWS VERSION" OPTION SELECT THE SPECIFIC OS VERSIONS YOU WANT TO ALLOW, SUCH AS WINDOWS SERVER 2022 X64 AND WINDOWS SERVER X64.



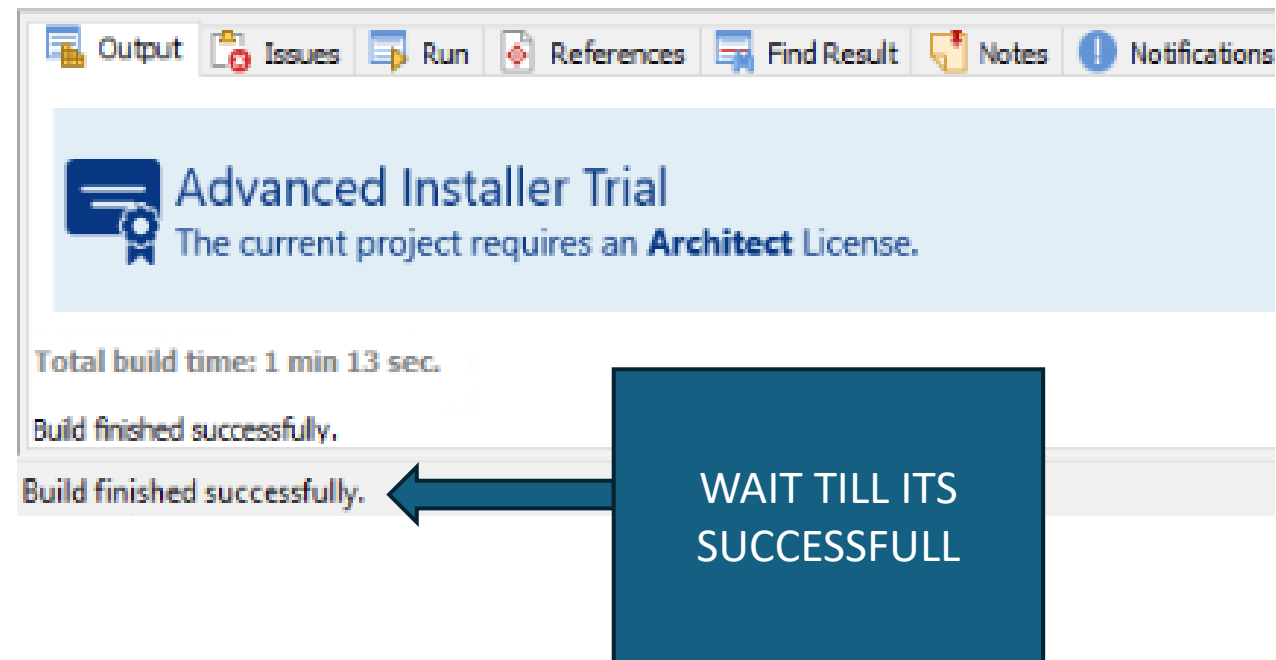
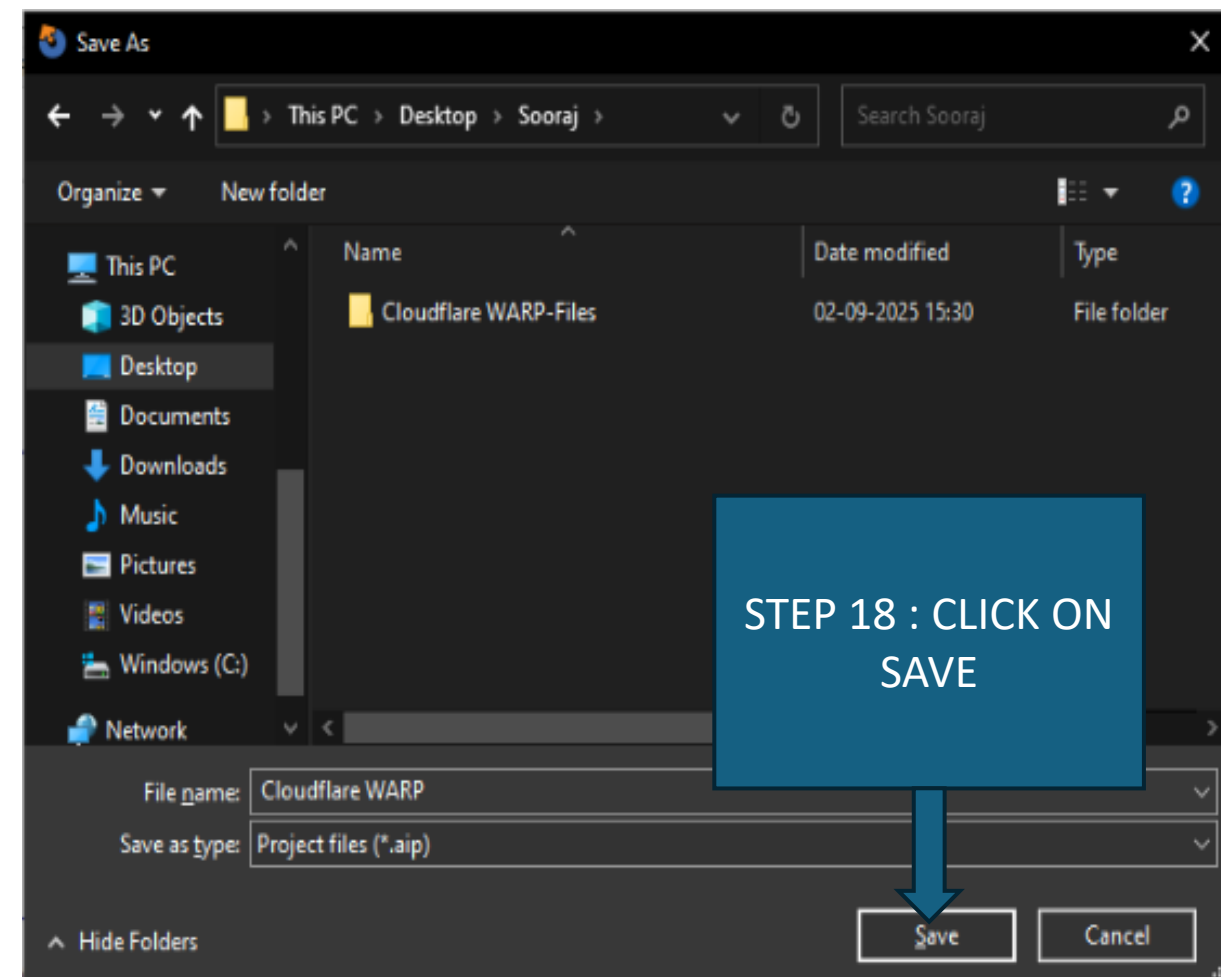
STEP 12 : GO TO "PRODUCT DETAILS" AND THEN CLICK "BUILD."



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 ▾UninstallRepair

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.	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

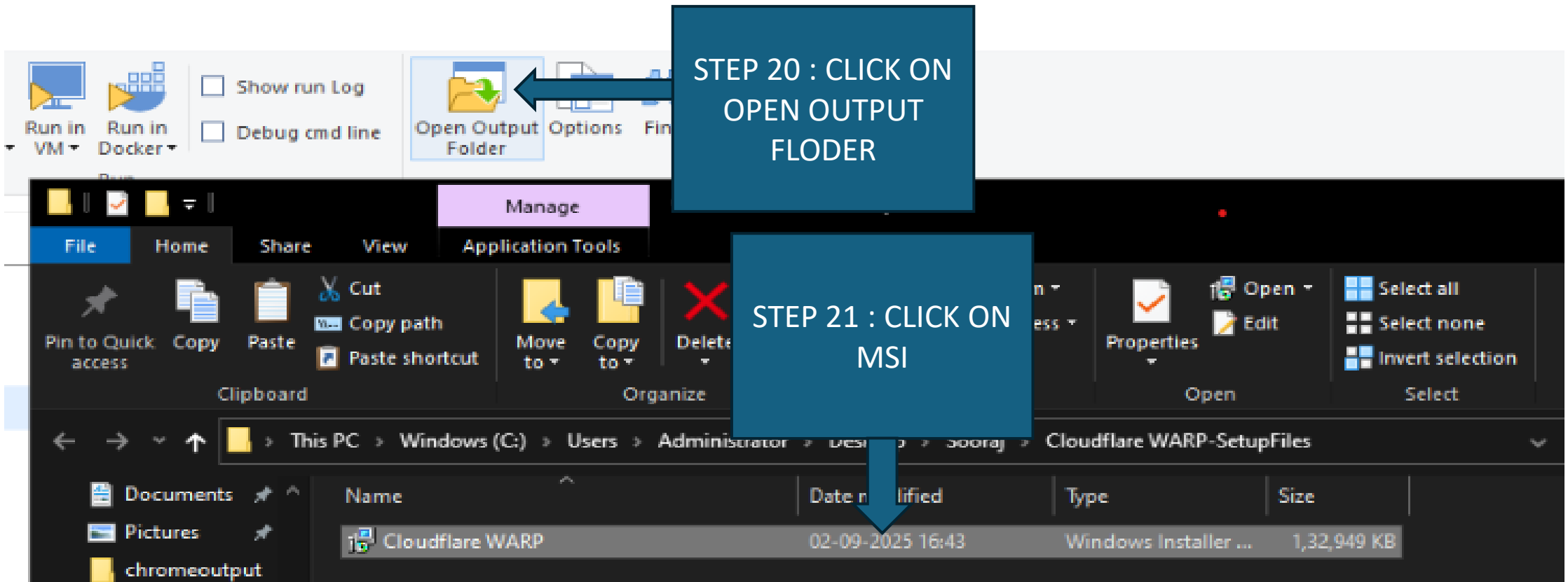
Yes

No

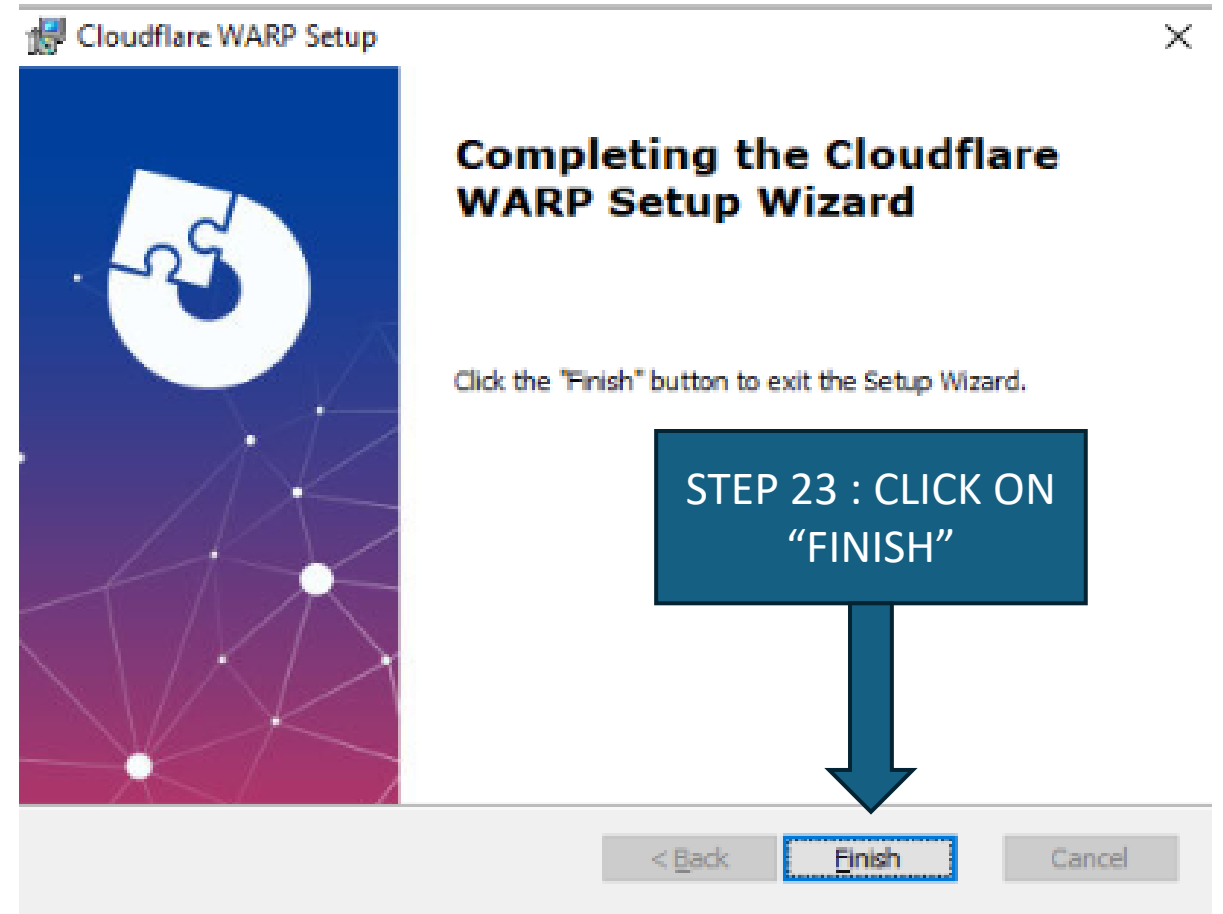
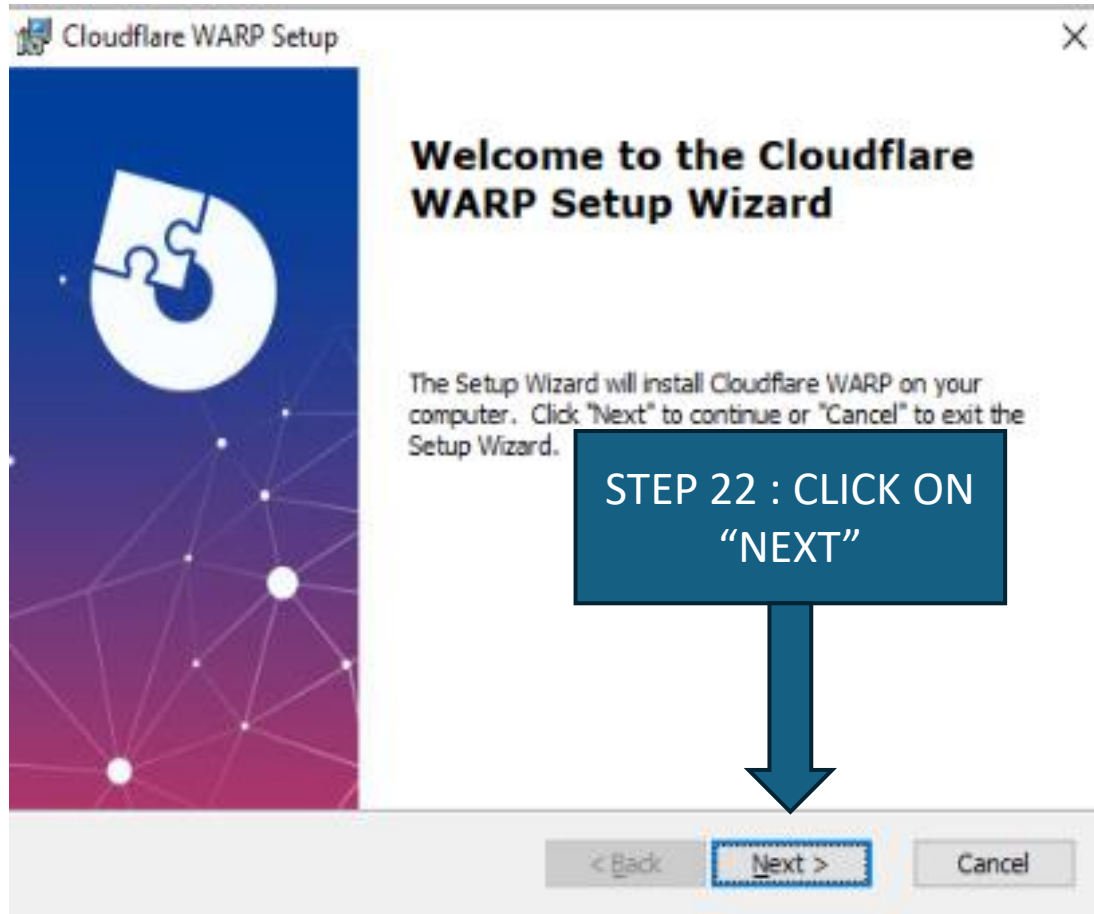
STEP 19 : CLICK ON YES

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.

OrganizeUninstallChangeRepair

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		139.0.7258.155
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
Microsoft .NET Framework 4.8.1 Console	Microsoft Corporation	02-08-2025	177 MB	5.2503.1003.1000
Microsoft .NET Framework 4.8.1 Primary Site Setup	Microsoft Corporation	02-08-2025		5.00.9133.1000
Microsoft .NET Framework 4.8.1 Server	Microsoft Corporation	30-08-2025		139.0.3405.125
Microsoft .NET Framework 4.8.1 Server	Microsoft Corporation	02-08-2025	12.1 MB	2.3.28307
Microsoft .NET Framework 4.8.1 Server	Microsoft Corporation	02-08-2025	7.27 MB	17.10.6.1
Microsoft .NET Framework 4.8.1 Server	Microsoft Corporation	02-08-2025	15.6 MB	18.5.1.1
Microsoft .NET Framework 4.8.1 Server	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

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 24 : MSI
INSTALLED

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 'Launch Conditions' configuration window. On the left, a sidebar contains a 'Find' search bar and a list of categories: Cloudflare WARP, Analytics, Deployment, Requirements, Launch Conditions (highlighted with a blue bar and an arrow pointing to it), Modules, and User Interface. A dark blue box at the bottom left contains the text 'STEP 25 : CLICK ON LAUNCH CONDITION' with an arrow pointing to the 'Launch Conditions' category in the sidebar.

The main area of the window is titled 'Launch Conditions' and has three tabs: 'System' (selected), 'Software', and 'Custom'. Under the 'System' tab, there is a section titled 'Supported Operating Systems'. This section contains two expandable lists: '64-bit Windows versions' and '32-bit Windows versions'. The '64-bit Windows versions' list includes: Windows 7 x64, Windows Server 2008 R2 x64, Windows 8 x64 (checked with a tick mark), Windows Server 2012 x64, Windows 8.1 x64, Windows Server 2012 R2 x64, Windows 10 x64, Windows 11 x64, and Windows Server x64. A dark blue box on the right contains the text 'STEP 26 : CLICK ON RANDOM VERSION' with an arrow pointing to the 'Windows 8 x64' entry in the list.

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

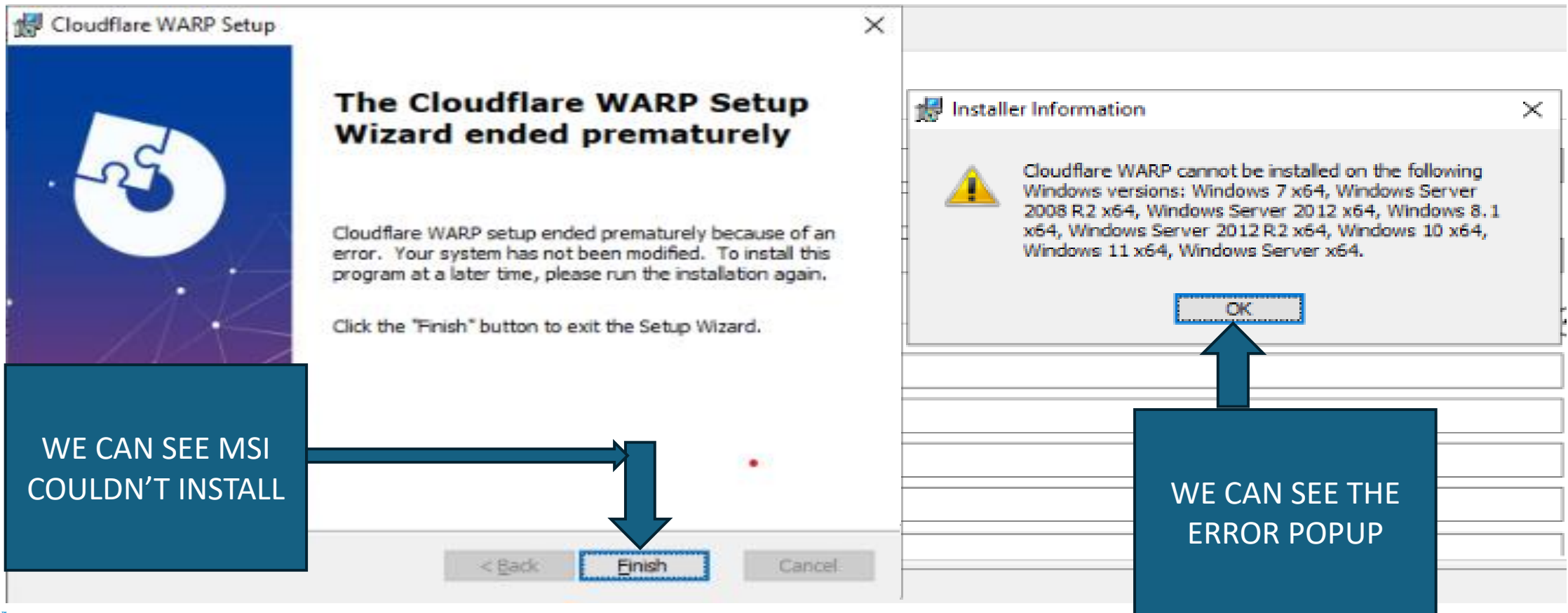
The screenshot displays the Advanced Installer application window. The 'Product Details' tab is active, showing fields for 'Product Name' (Cloudflare WARP), 'Version' (25.6.1400.0), and 'Company Name' (Cloudflare, Inc.). A blue callout box with the text 'STEP 27 : CLICK ON BUILD' points to the 'Build' button in the top toolbar. Another blue callout box with the text 'WAIT TILL MSI IS BUILD SUCCESSFUL' points to the 'Output' tab. The 'Output' tab is selected, showing a message: 'Advanced Installer Trial. The current project requires an Architect License.' Below this, it states 'Total build time: 1 min 13 sec.' and 'Build finished successfully.' A large blue arrow points from the 'Wait till MSI is build successful' callout to the 'Build finished successfully' message.

STEP 27 : CLICK ON BUILD

WAIT TILL MSI IS BUILD SUCCESSFUL

Build finished successfully.

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