Edit Custom Tables in Orca

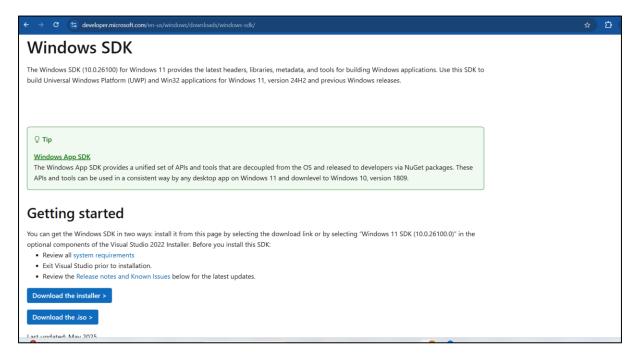
What is MSI?

MSI (Microsoft Installer) is a Windows installation file format used for installing, maintaining, and removing applications. MSI files contain a database of installation instructions divided into **tables**, which Orca can view and modify.

What is Orca?

Orca is a **free MSI editor tool** provided by Microsoft as part of the Windows SDK. It allows users to **View and modify** internal tables of .msi files, **Add custom logic** during installation and **Customize registry** changes, file deletions, environment variables, etc.

To Download Orca(https://developer.microsoft.com/en-us/windows/downloads/windows-sdk/)



Goal of This Project

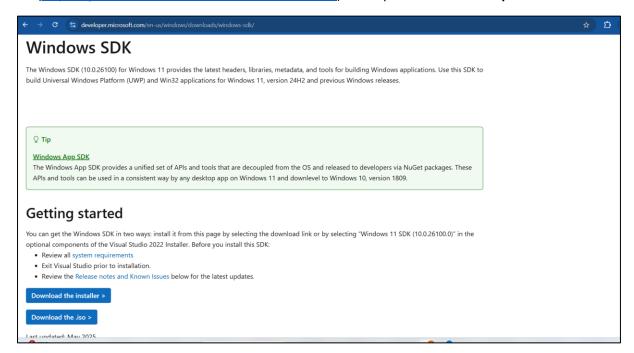
- To see how we add and edit custom tables in an MSI file using Orca.
- we will manually add:
 - Environment Table to set environment variables
 - RemoveFile Table to delete specific files or folders
 - Registry Table to add or change Windows Registry entries

Requirements:

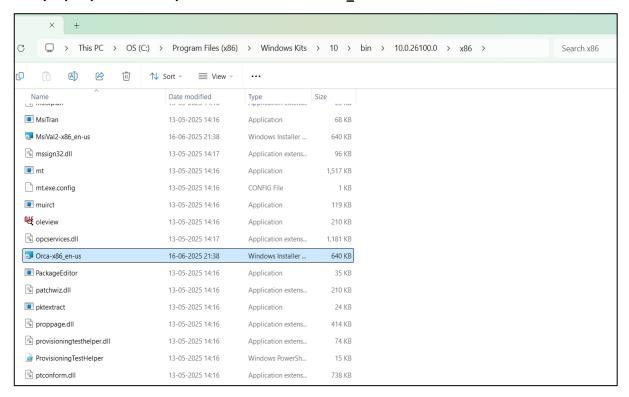
- Windows Operating System (Windows 10 or 11)
- Orca Tool (installed via Windows SDK)
- An .msi file (Example: Firefox.msi or any other test MSI

Steps to Edit Custom Tables in Orca

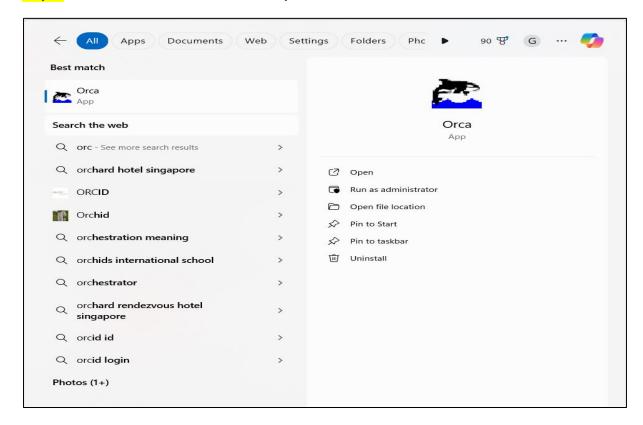
Step 1: Download Orca from the link given above or **download** it directly using this link(https://go.microsoft.com/fwlink/?linkid=2320455) then open the **winsdksetup**



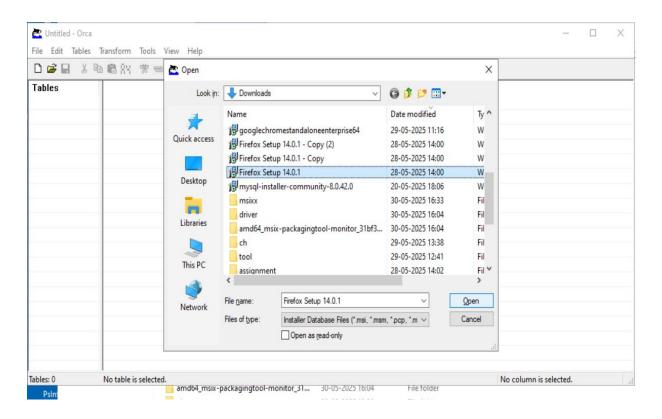
Step 2: Once the setup is installated, then navigate to this path C:\Program Files (x86)\Windows Kits\10\bin\10.0.26100.0\x86 and install the Orca-x86_en-us.msi



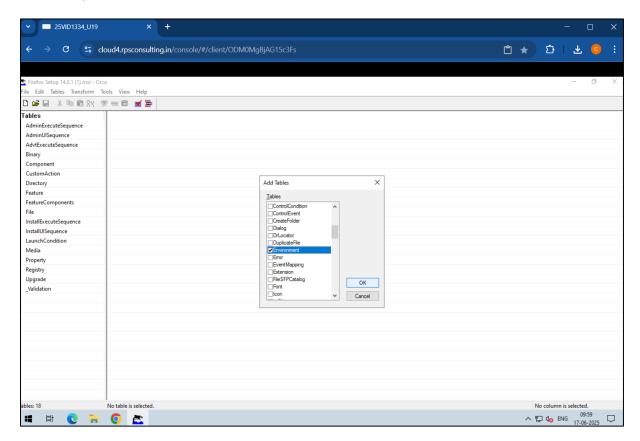
Step 3: Launch Orca from Start Menu and Open Orca



Step 4: Click on File and Open choose your MSI file (eg: Firefox.msi)



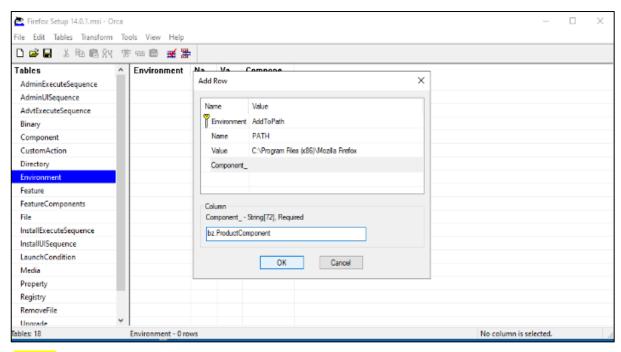
Step 5: Add a Missing Table Click on Tables > Add Tables...Choose the table you want to add Environment.idt, RemoveFile.idt, and Registry.idt. If the table is already present, skip this and directly add rows.



Step 6: Add Entries to Environment Table

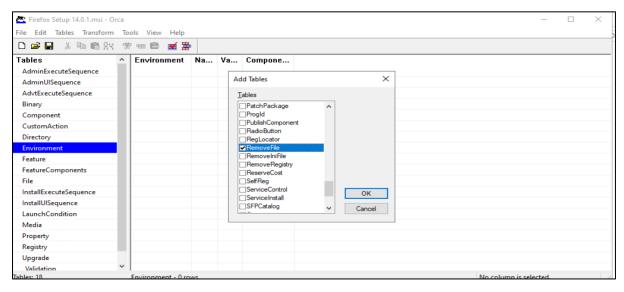
This table adds environment variables (e.g., PATH, JAVA_HOME,etc)

Column	Value
Environment	AddToPath
Name	PATH
Value	C:\Program Files (x86)\Mozilla Firefox
Component	bz.ProductComponent
Action	set



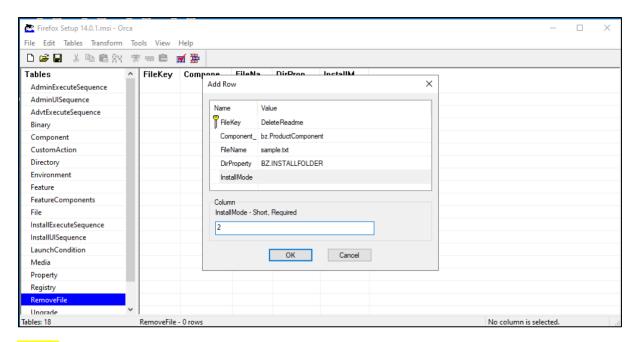
Step 4: Add Entries to RemoveFile Table

This table removes files/folders on install or uninstall



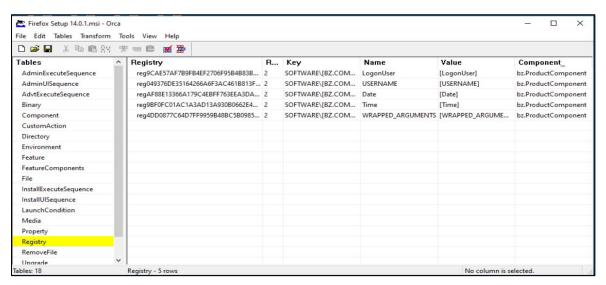
Column	Value
FileKey	DeleteReadme
Component	bz.ProductComponent
FileName	sample.txt
DirProperty	BZ.INSTALLFOLDER
InstallMode	2 (Remove on uninstall only)

This removes sample.txt from the install directory on uninstallation we have to add the **sample.txt** file in the **C:\Program Files (x86)\Mozilla Firefox** path

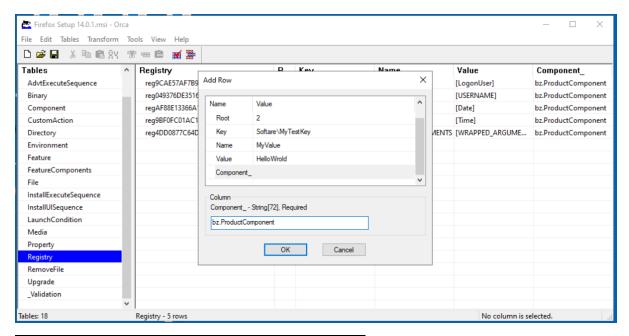


Step 5: Add Entries to Registry Table

This table modifies Windows Registry during installation



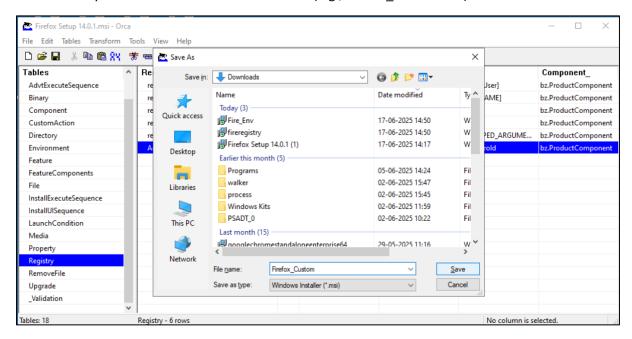
Column	Value
Registry	AddTestRegistry
Root	2
Key	Software\MyTestKey
Name	MyVlaue
Value	HelloWorld
Component	bz.ProductComponent



Root Number	Hive
0	HKEY_CLASSES_ROOT
1	HKEY_CURRENT_USER
2	HKEY_LOCAL_MACHINE
3	HKEY_USERS

Step 6: Save the msi click File > Save As

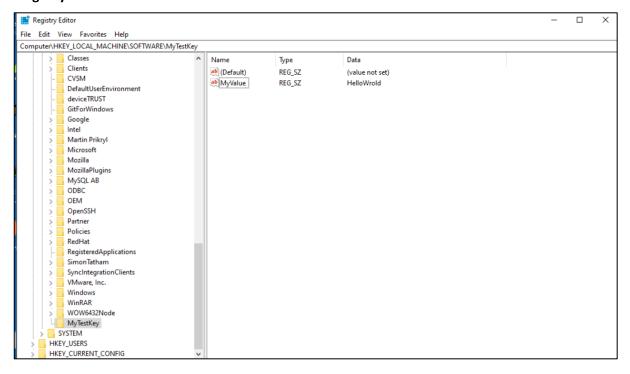
Save your modified MSI with a new name (e.g., Firefox_Custom.msi)



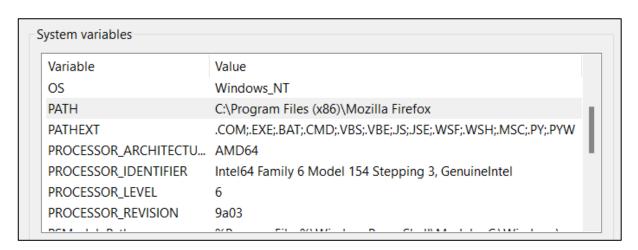
Step 7: Then open the Firefox_Custom.msi and install it if there exist firefox then uninstall the old one and install the new modified Firefox Custom.msi

To Check the Environment variables, Registry Editor and File deletion

Registry Editor



Environment Variable



Conclusion

- Orca allows powerful customization of MSI behavior
- By manually editing Environment, RemoveFile, and Registry tables, we can Set environment variables, Clean up unnecessary files, Configure registry entries, etc
- These techniques are **valuable** for software packaging, enterprise deployment, and system integration.