

ADD FILE ASSOCIATION VIA MSI

What is MSI?

MSI stands for **Microsoft Installer** also known as **Windows Installer**. It is a **file format** (.msi) used to **install, maintain, and remove software** on Windows.

Example: If you download **Firefox.msi**, you're downloading an installer that can install Firefox using the Windows Installer service.

What is File Association?

A file association is a **relationship between a file type** and a **supporting application**.

In short, File association **associate** (connect) file type to the app which are **capable** of opening the file.

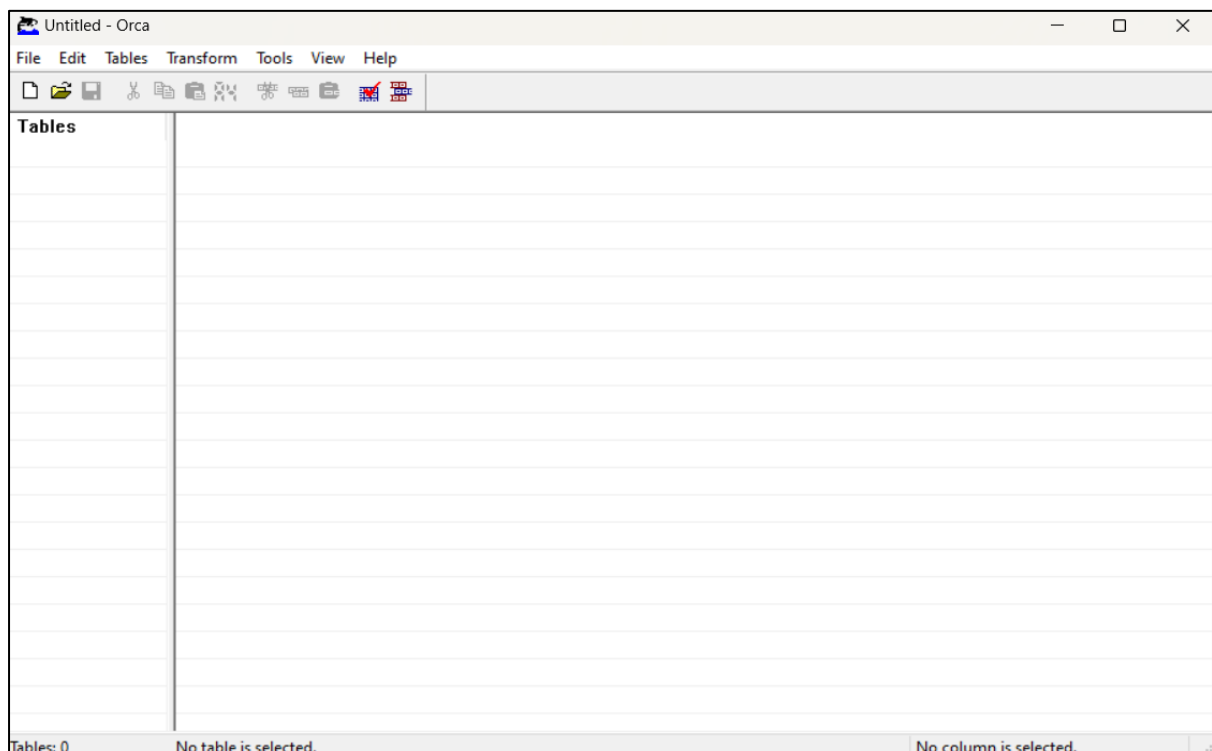
Example, a Word document may be associated with Microsoft Word. This means when you double-click a Word document, Microsoft Word will open the file.

What is Orca?

Orca is a free **Windows Installer package** editor from Microsoft. **Orca** is a **table editor** for .msi (Microsoft Installer) files. It lets you **view and modify** the internal database tables of an MSI package.

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

Orca Interface:



Requirements:

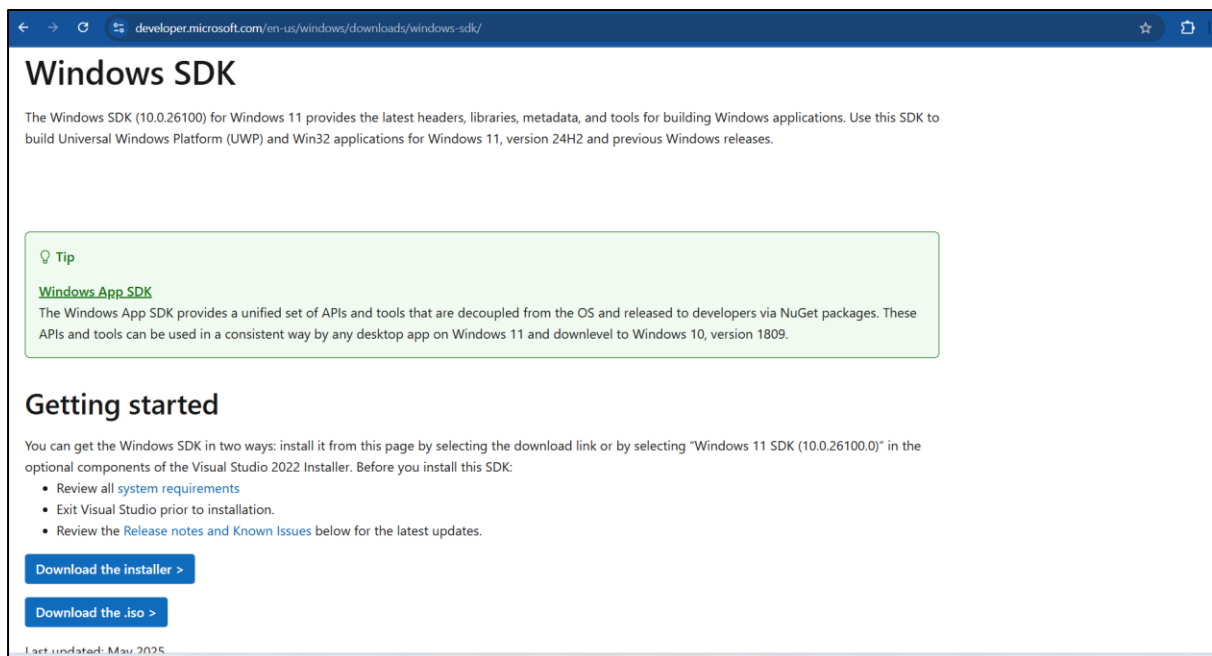
- Windows Operating System (Windows 10 or 11)
- Windows SDK (to install the Orca tool)
- Orca Tool (used to edit the MSI file)
- Firefox MSI File (eg: Firefox.msi)
- Notepad (to create a .gha test file)
- To download FirefoxMSI
(<https://www.exemsi.com/downloads/packages/Firefox/Firefox%20Setup%202014.0.1.msi>)


Goal:

- This project shows how to change an **MSI installer** to add a **custom file** extension and to open the supported application automatically.
- We used a tool called **Orca** to edit the .msi file (I have used Firefox.msi).
- The goal was to **link files** with the custom extension (eg: .gha) to **open** with the **Firefox** browser (or any other application).
- Now, when we **double-click** a **.gha** file, it will open the **Firefox** automatically.
- This method is useful when we want to control how files open after installing a program.
- It can help IT teams or developers customize software setup easily.

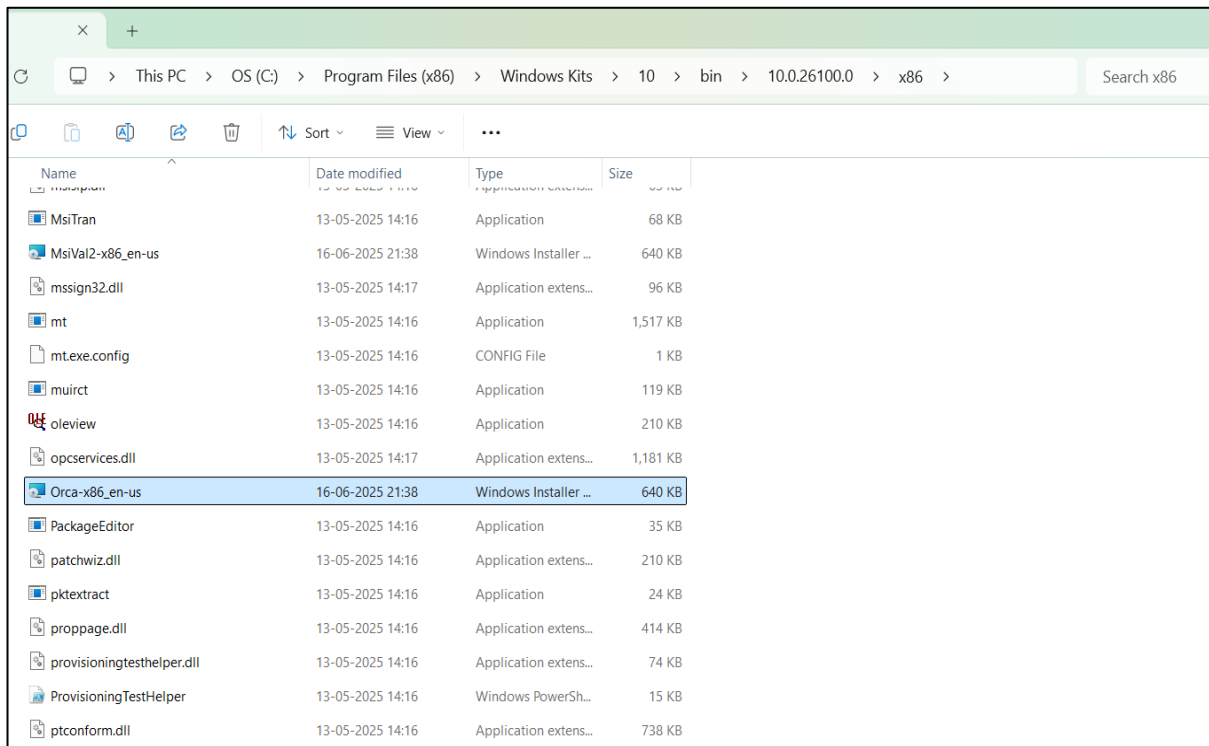
Steps to Add File Association

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**

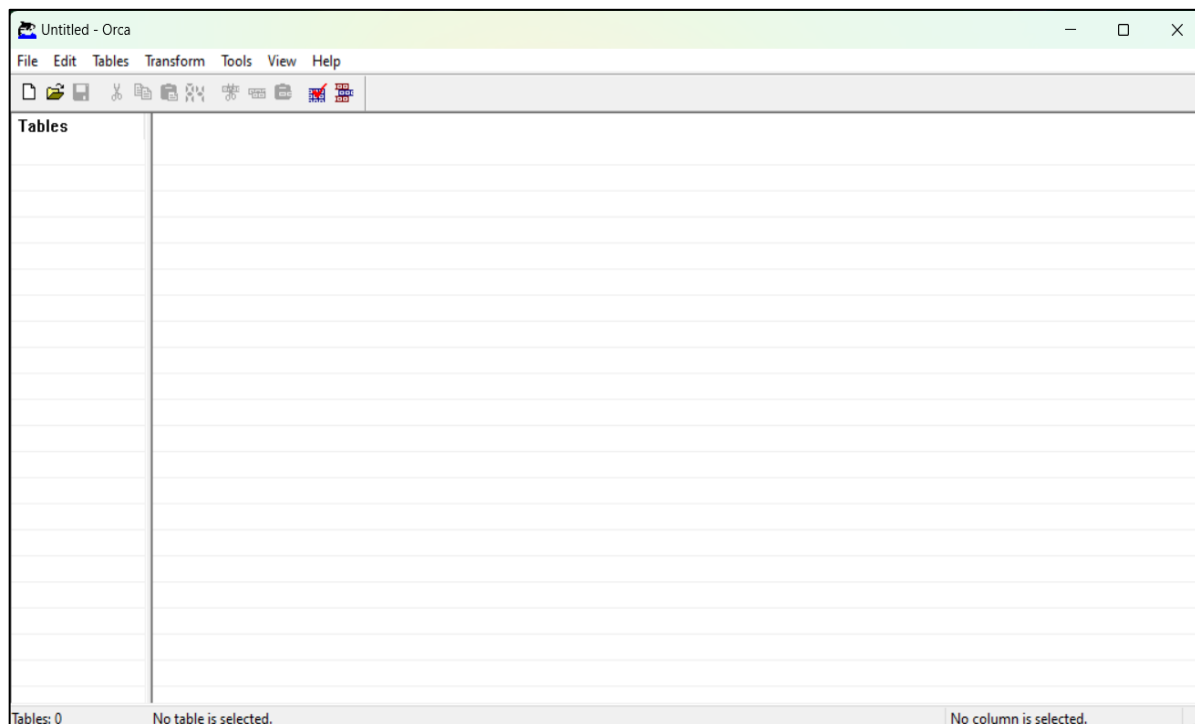


 winsdksetup	16-06-2025 21:26	Application	1,415 KB
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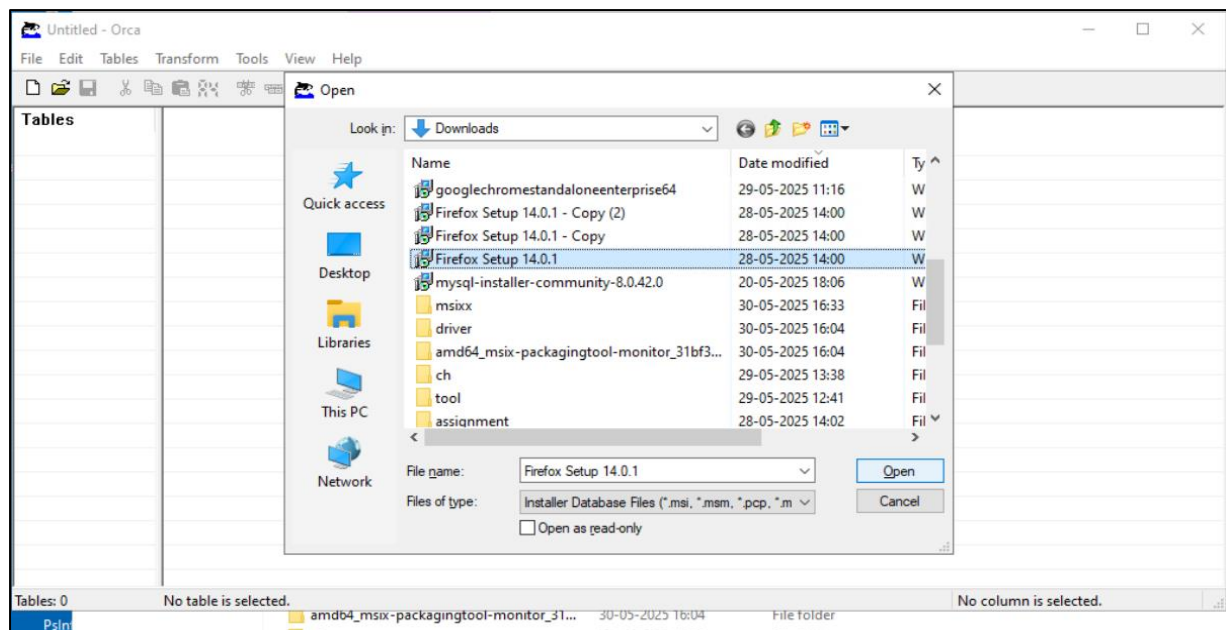
Step 2: Once the setup is **installed**, then **navigate** to this path **C:\Program Files (x86)\Windows Kits\10\bin\10.0.26100.0\x86** and **install the Orca-x86_en-us.msi**



Step 3: Search Orca in the **Start Menu** and Open **Orca App**



Step 4: Click on **File** and **Open** the **msi** package which you want to **view** or **modify**.



Step 5: In the **Registry** table on the left side, **manually add 3 rows** for each row we will be have to fill **Registry, Root, Key, Value, Component** column and the **Component** (ex: bz.ProductComponent) will be same for all the 3 rows and **Root** (ex: 0) also

In the first row, Registry column enter the Extfile name and in the Key give the file extension you want (ex: .gha) and set a value (eg:FirefoxHTML.gha)

First Row

- Registry: ghaExtFile
- Root: 0 <----same for all 3 rows
- Key: .gha <----this is custom extension
- Value: FirefoxHTML.gha
- Component: bz.ProductComponent <----same for all 3 rows

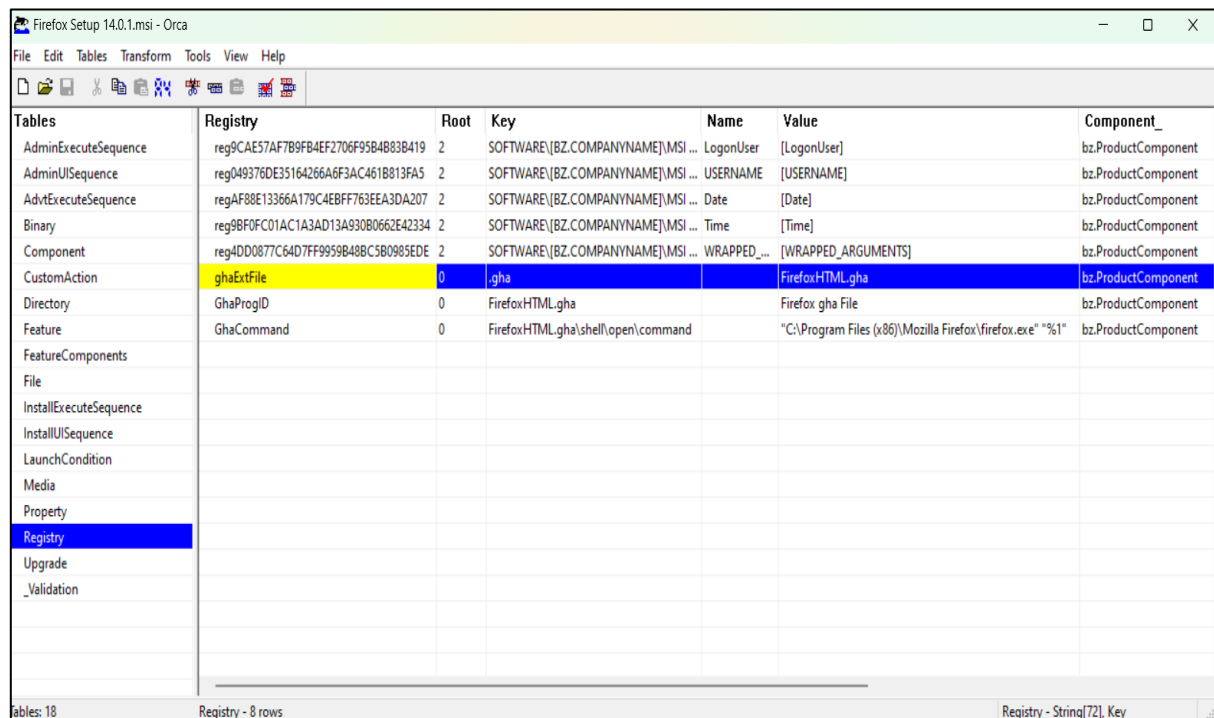
Second Row

- Registry: GhaProgID
- Key: FirefoxHTML.gha
- Value: Firefox gha File

Third Row

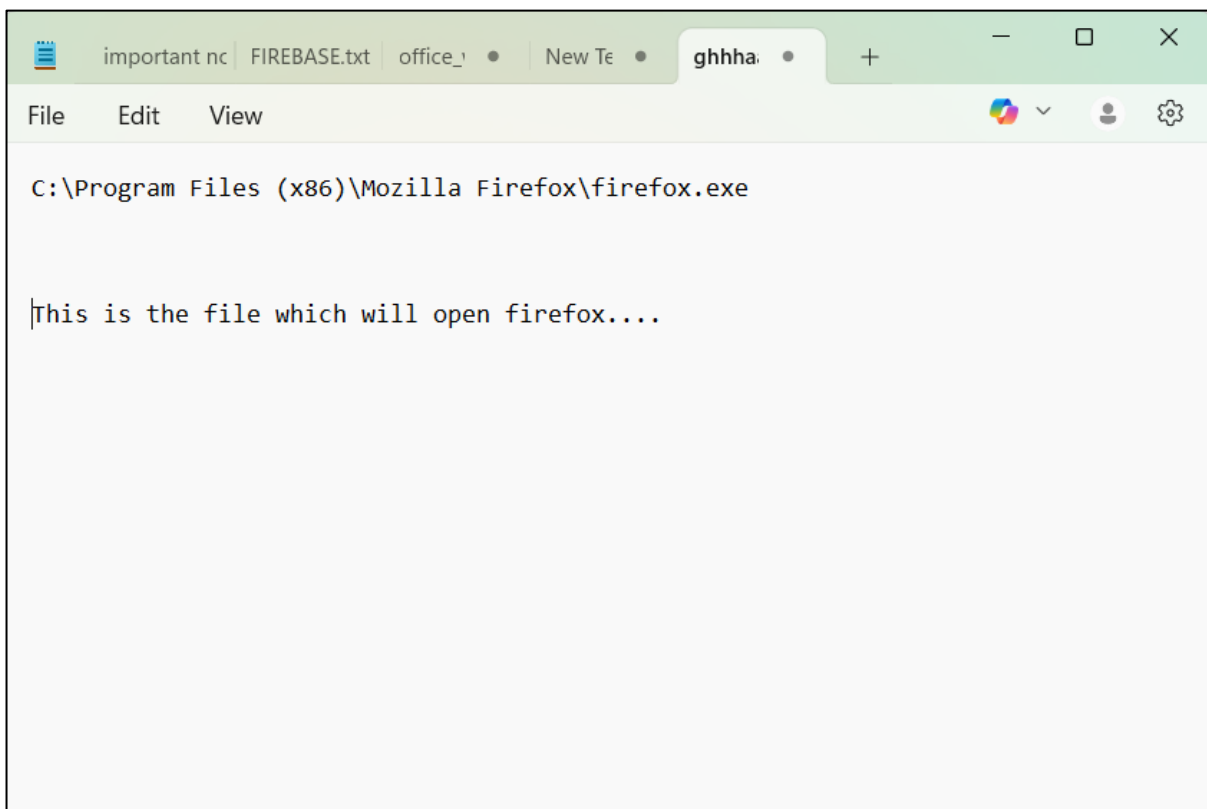
- Registry: GhaCommand
- Key: FirefoxHTML.gha\shell\open\command
- Value: "C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"
(%1 represents the file the user double-clicked)

Step 6: After adding the 3 rows, then in **File** click on **save as** (I have given **fireeeee.msi**) and give a proper name then **close Orca**



Tables	Registry	Root	Key	Name	Value	Component_
AdminExecuteSequence	reg9CAE57AF7B9FB4EF2706F95B4B83B419	2	SOFTWARE\{BZ.COMPANYNAME}\MSI ...	LogonUser	[LogonUser]	bz.ProductComponent
AdminUISequence	reg049376DE35164266AF3AC461B813FA5	2	SOFTWARE\{BZ.COMPANYNAME}\MSI ...	USERNAME	[USERNAME]	bz.ProductComponent
AdvExecuteSequence	regAF88E13366A179C4EBFF763EEA3DA207	2	SOFTWARE\{BZ.COMPANYNAME}\MSI ...	Date	[Date]	bz.ProductComponent
Binary	reg9BF0FC01AC1A3AD13A930B0662E42334	2	SOFTWARE\{BZ.COMPANYNAME}\MSI ...	Time	[Time]	bz.ProductComponent
Component	reg4DD0877C64D7FF9959B48BC5B0985EDE	2	SOFTWARE\{BZ.COMPANYNAME}\MSI ...	WRAPPED_...	[WRAPPED_ARGUMENTS]	bz.ProductComponent
CustomAction	ghaExtFile	0	.gha	FirefoxHTML.gha	FirefoxHTML.gha	bz.ProductComponent
Directory	GhaProgID	0	FirefoxHTML.gha	Firefox gha File	Firefox gha File	bz.ProductComponent
Feature	GhaCommand	0	FirefoxHTML.gha\shell\open\command	"C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"	"C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"	bz.ProductComponent
FeatureComponents						
File						
InstallExecuteSequence						
InstallUISequence						
LaunchCondition						
Media						
Property						
Registry						
Upgrade						
_Validation						

Step 7: Open **Notepad** and create a new **test file** with your **custom extension (eg: .gha)** and **select All files** as the file type



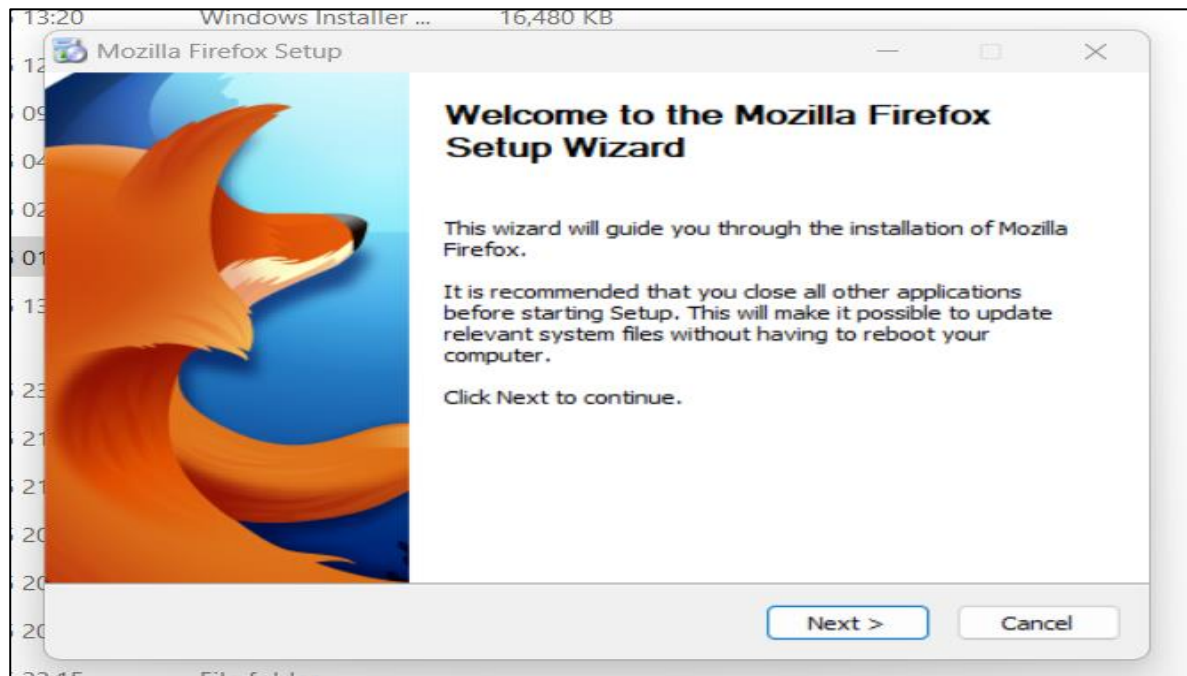
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C:\Program Files (x86)\Mozilla Firefox\firefox.exe

This is the file which will open firefox....

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Step 8: **Uninstall** the previous MSI if it is already installed (In my case, I had Firefox installed, so I uninstalled it.) then **install** the new MSI that you saved in Step 6 (eg: fireeeeeeee.msi the one with file association added).



Step 9: **Double click** on the file we create using notepad (.gha) it will **open** the **Firefox**

	ghhhhaaaaaa	17-06-2025 01:58	Firefox gha File	1 KB
	fireeeeeeeeeee	17-06-2025 01:56	Windows Installer ...	16,480 KB

