COMODO
Creating Trust Online®

Comodo IceDragon

Software Version 58.0

User Guide

Guide Version 58.0.061118

Comodo Security Solutions
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1. Comodo IceDragon – Introduction

Comodo IceDragon is a fast, secure and versatile Internet Browser based on Mozilla core and infused with Comodo's unparalleled level of security.

Guide Structure

This guide is intended to take you through the installation, configuration and use of Comodo IceDragon.

- Comodo Dragon - Introduction
- System Requirements
- Download And Install Comodo IceDragon
- The Basics
  - Start Comodo IceDragon
  - Set IceDragon as your Default Browser
  - Set Your Homepage
  - Search the Internet
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  - Block Websites from Tracking your Browsing History
  - View and Manage Permission Settings
  - Configure Suggestions when Entering a Website Address
  - Manage Cache

- Manage Add-on permissions
- Manage Passwords
- SSL Certificates and Secure Connections
- Manage SSL Certificates and HTTPS Security
- Force Secure Connections
- Website Security Indicators
- Disable accessibility indicator setting
- Configure IceDragon performance and browsing settings
- Network Proxy settings

- Downloads
  - Download a File
  - Change Download Location
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- Introduction to Add-ons
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    - Configure Updates to Add-ons
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- Tools and other Features
  - Customize Applications for Opening Different File Types
  - Search Within Page Content
  - Form Autofill
  - Keyboard and Mouse Shortcuts for Comodo IceDragon
  - Manage IceDragon in Safe mode
  - Scan Websites for Malware and Blacklist Using Web Inspector
  - Set up Comodo IceDragon sync information
  - View Digital Rights Management
  - Improve IceDragon Performance Settings
- Web Developer Tools
  - Open the Tools console
  - Inspect Page Elements
  - Use the Web Console
  - Remove Inconsistencies with HTML, CSS and Javascript
  - View and Run Experimental Style Sheets on a Webpage
  - Improve Web Page/Web Application Performance
  - Memory Tool
  - Network Monitoring

- Developer Toolbar
- Use the WebIDE
- Browser Console
- Responsive Design View
- Eyedropper
- Run Experimental Java Scripts on Page
- View Page Source
- Service Workers
- Connect Remote Device
- Add More Web Development Tools
- Work Offline

- Troubleshooting
  - Error: “"This Connection is Untrusted"
- Report a Bug

2. System Requirements

To ensure optimal performance of Comodo IceDragon, please ensure that your PC complies with the minimum system requirements:

- Windows 8 / 8.1 / 7 / Vista / XP
- 128 MB RAM
- 40 MB Hard Disk Space

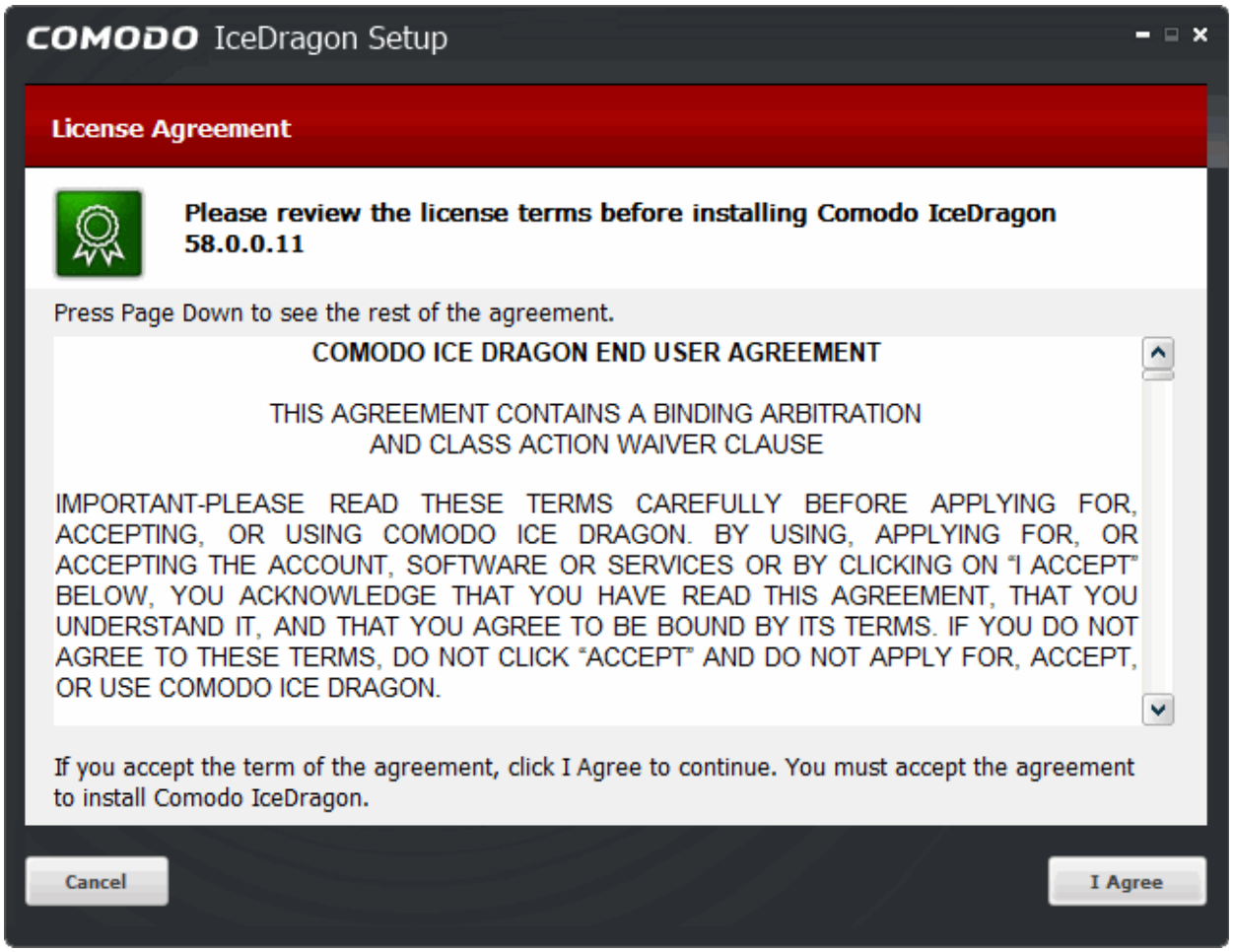
See **Download And Install Comodo IceDragon** to download and install the IceDragon.

3. Download And Install Comodo IceDragon

You can download the IceDragon setup file from: **http://icedragon.comodo.com/**

After downloading the file, double click icedragonsetup.exe to start the installation wizard.

Step1 - End User License Agreement

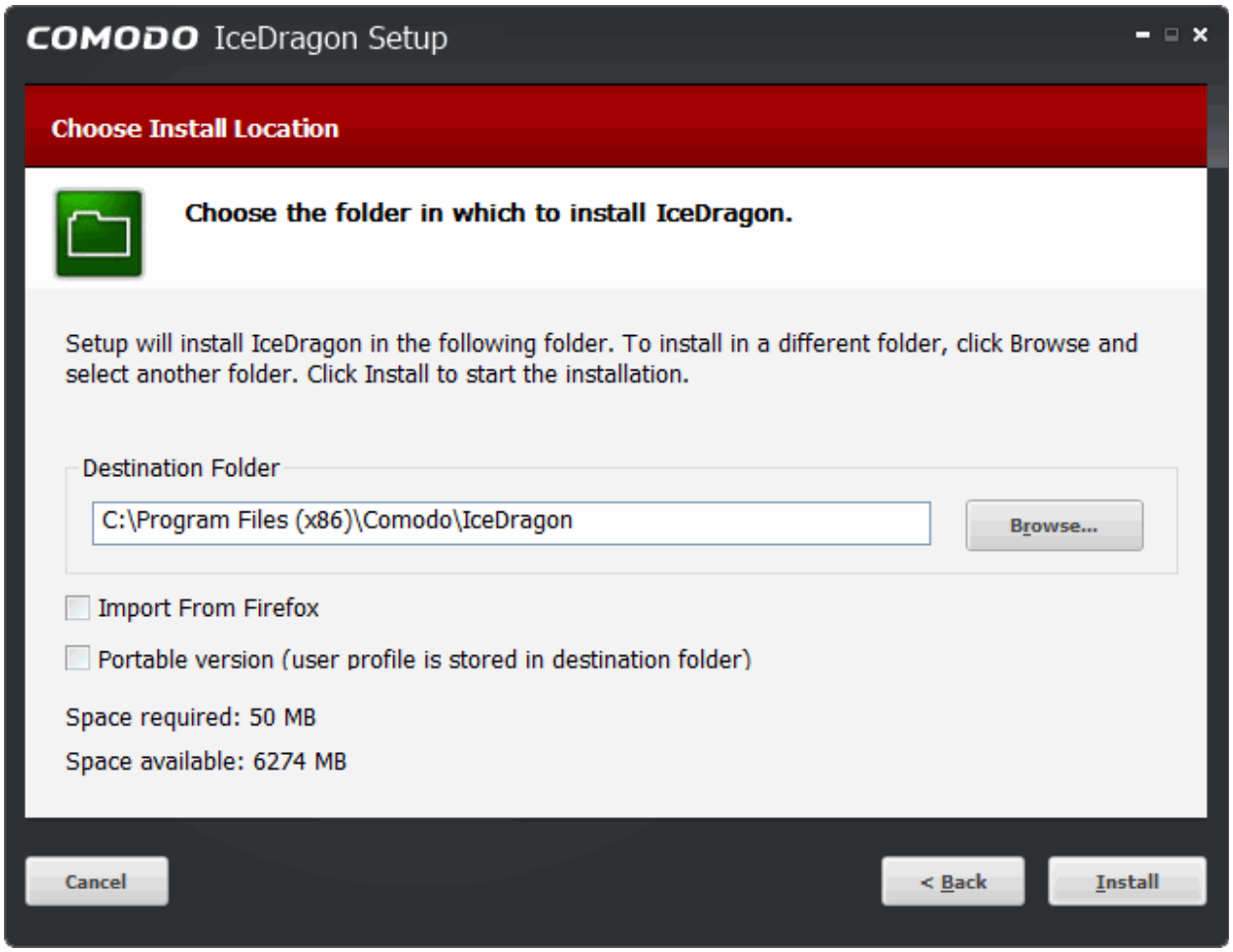


The EULA screen of the setup wizard is displayed. Complete the initialization phase by reading and accepting the End User License Agreement (EULA).

- Click 'I agree' button to continue the installation.
- Click 'Cancel' button to abort the installation.

Step 2 - Select Installation Folder

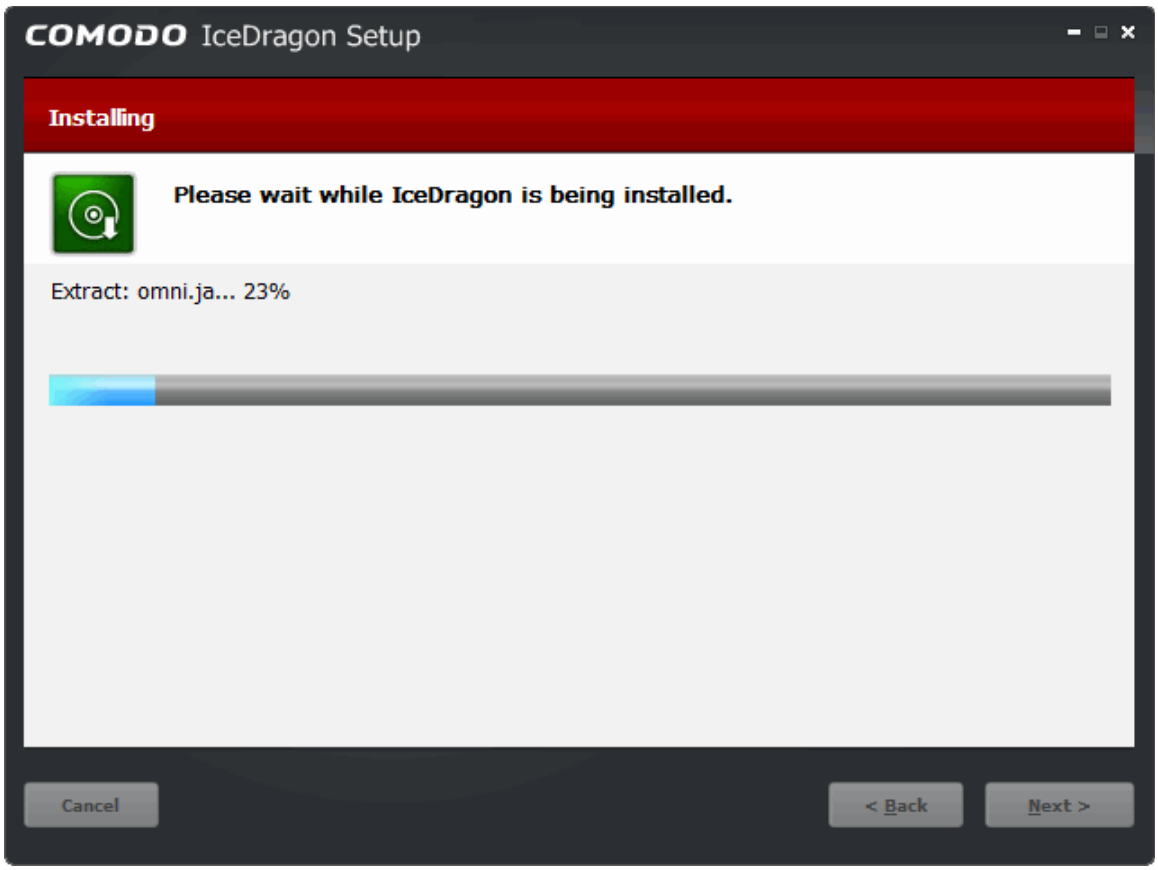
The next screen allows you to select where you want to install Comodo IceDragon. The default installation path is C:\Program Files(x86)\Comodo\IceDragon.



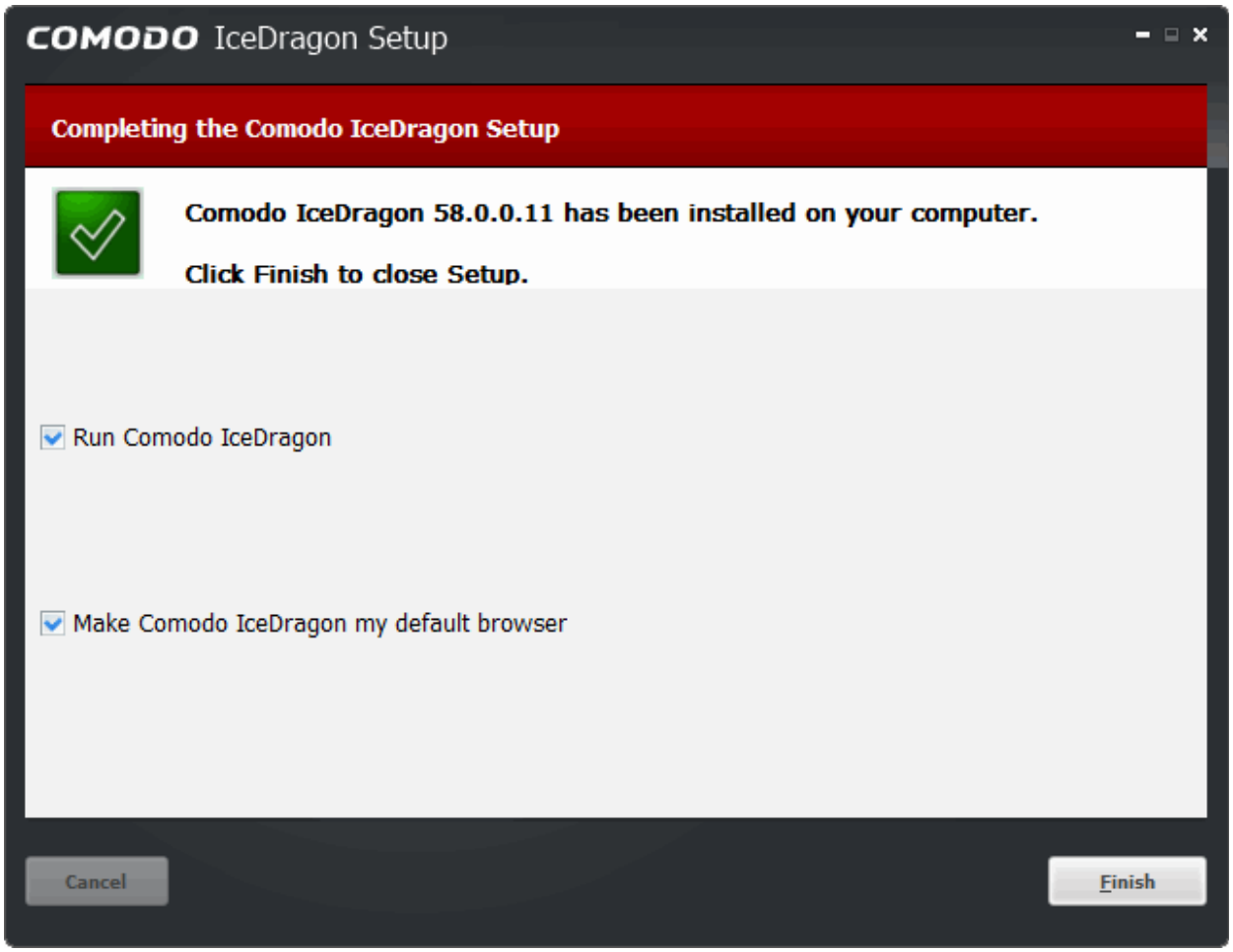
- Click 'Browse' to choose a different installation location.
- 'Import from Firefox' – Copies your bookmarks, history, passwords and other data from Firefox into IceDragon.
- 'Portable version (user profile is stored in destination folder)' – The portable version saves all user profile data to the IceDragon folder instead of the Windows 'user' folder. This allows you to copy the IceDragon folder to a USB drive, plug it into any computer and access your personalized version of the browser. See **Portable Version** help page for more details.
- Click 'Next' to move onto the next stage of the installation wizard.

Step 3 – Installation

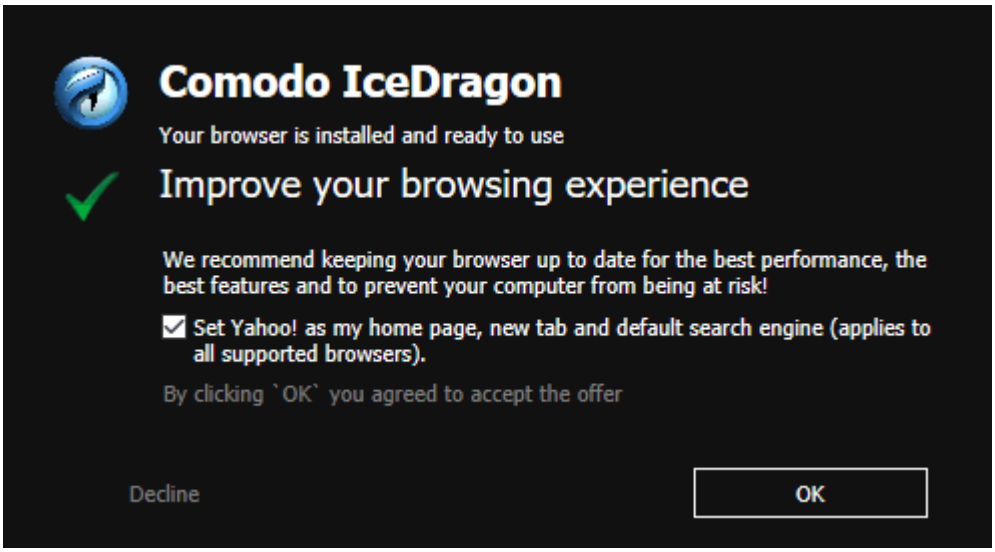
Next, IceDragon will begin installing. The progress will be displayed as followed:



- The 'Installation Complete' dialog will appear once setup is complete:



- Leave 'Run Comodo IceDragon' enabled to start browsing with IceDragon immediately.
- Leave 'Make Comodo IceDragon my default browser' selected to make Comodo IceDragon your default browser. If you want to keep your current browser as default, deselect the checkbox.
- Click 'Finish'.
- You will also be offered the opportunity to set your search engine provider to Yahoo (or Yandex in Russia, Ukraine, Romania, Kazakhstan and Turkey):



- Choosing Yahoo/Yandex as your default search engine means:

- When you enter a search item into the address bar of a supported browser, the search will be carried out by Yahoo/Yandex
- A 'Search with Yahoo/Yandex' menu entry will be added to the right-click menu of supported browsers.
- Yahoo/Yandex will be set as the default search engine in the 'Search' box of supported browsers
- The instant 'search suggestions' that you see when you start typing a search item will be provided by Yahoo/Yandex

- Click 'Decline' to cancel the enhancements.

4. The Basics

This section of the guide explains how to launch, configure and use Comodo IceDragon to its full potential.

Click the following links to find out more:

- **Start Comodo IceDragon**
- **Set IceDragon As Your Default Browser**
- **Set Your Homepage**
- **Search The Internet**
- **Change Search Options**
- **Customize the Toolbar and the Menu**
- **Open Recently And Most Visited Websites In IceDragon**
- **View Browsing History**
- **Set Fonts, Languages And Encoding**
- **Configure IceDragon Updates**
- **Portable Version**
- **Uninstall IceDragon**

4.1. Start Comodo IceDragon

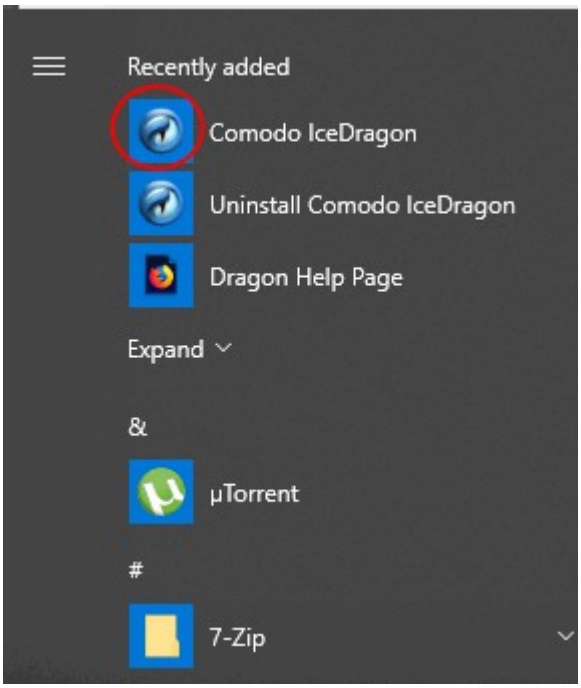
There are two different ways to start Comodo IceDragon:

- **Start Menu**
- **Desktop**

Start Menu

You can launch Comodo IceDragon via the Start Menu.

- Click Start and select All Programs > Comodo > IceDragon > Comodo IceDragon



Desktop

- Just double-click the Comodo IceDragon icon on your desktop.

Further reading related to the topic of this page:

- **Set Your Homepage**
- **Open Recently and Most Visited Websites in IceDragon**
- **Set IceDragon As Your Default Browser**

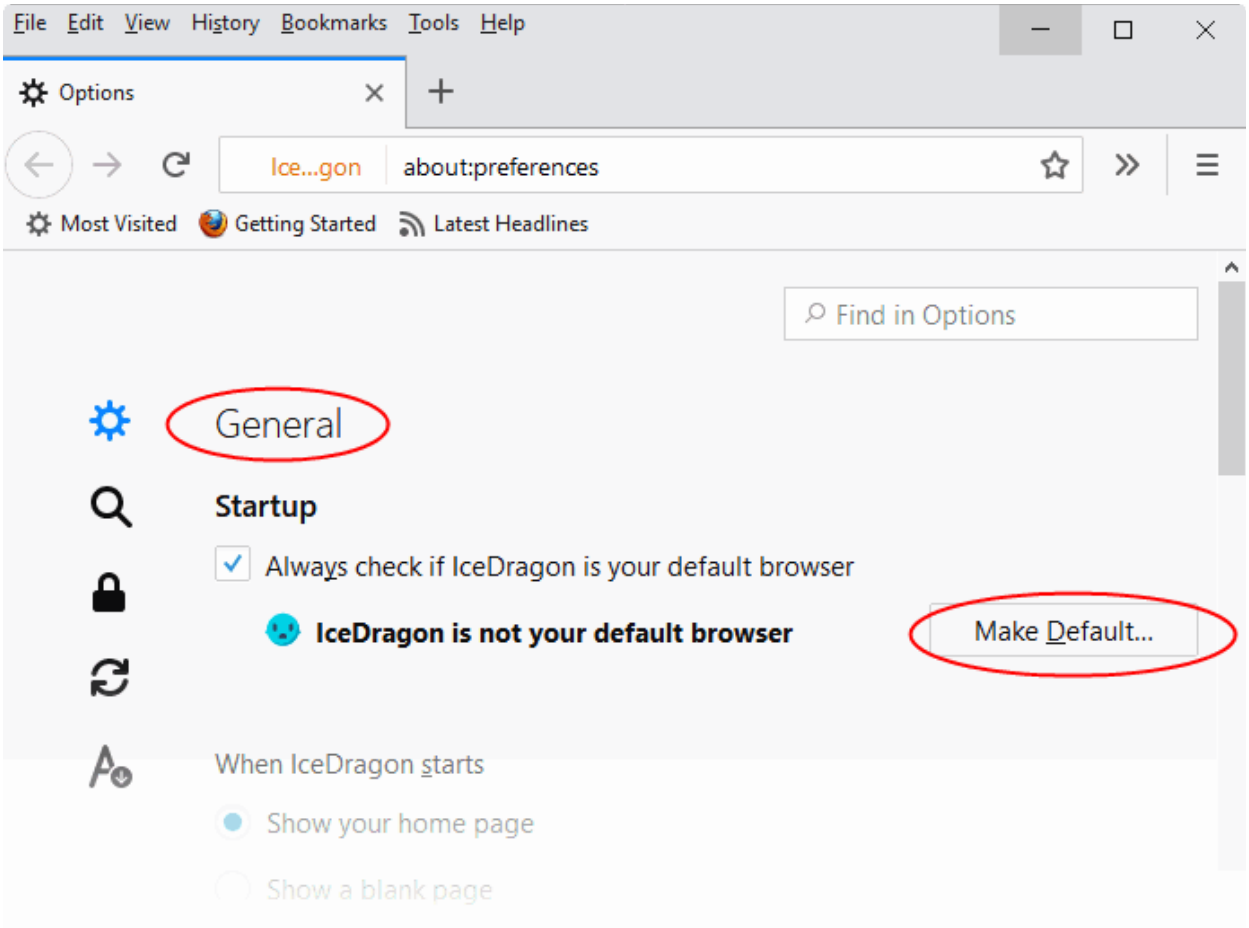
4.2. Set IceDragon as your Default Browser

If you have more than one browser installed, it's likely that you'll want to pick one as your 'go-to' browser for everyday use.

This means that it will automatically be used to view websites when you click a link in, say, an email or IM conversation.

To do this:

- Click the hamburger/'Open Menu' button at the top-right corner
- Select 'Options' > 'General' then click 'Make Default' button.



- Leaving the check 'Always check if IceDragon is your default browser ' box enabled will instruct IceDragon to check whether or not it is the default browser every time you start the software.

Related to this page:

- **Set Your Homepage**

4.3. Set Your Homepage

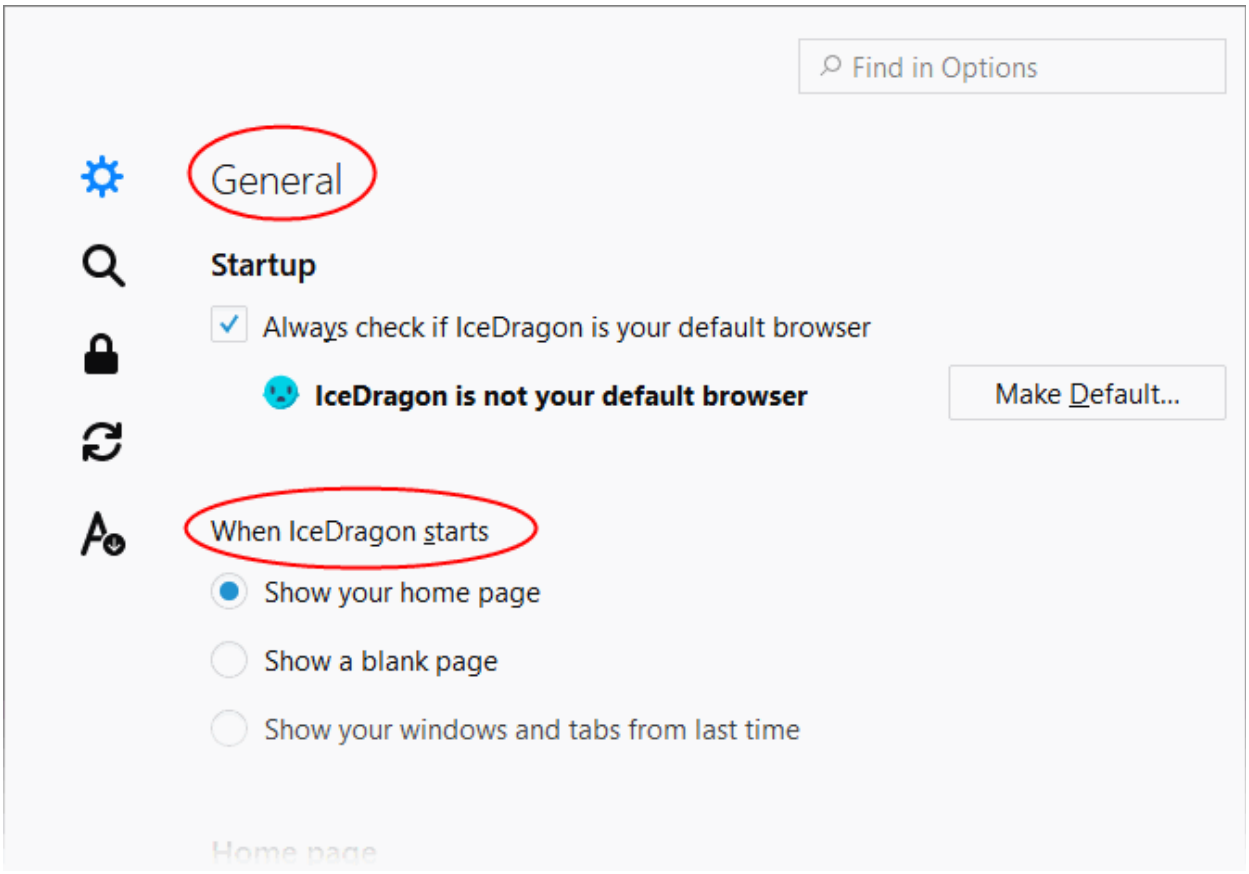
You can configure IceDragon to open at a specific page, or set of pages, by default. You can also make it start with a blank page or with whatever pages were open at the end of your last session.

Click the following links for more help:

- **Configure startup**
- **Home page**

Configure startup

- Click the hamburger/'Open Menu' button at the top-right corner.
- Select 'Options' > 'General'.
- Scroll to 'When IceDragon starts'.



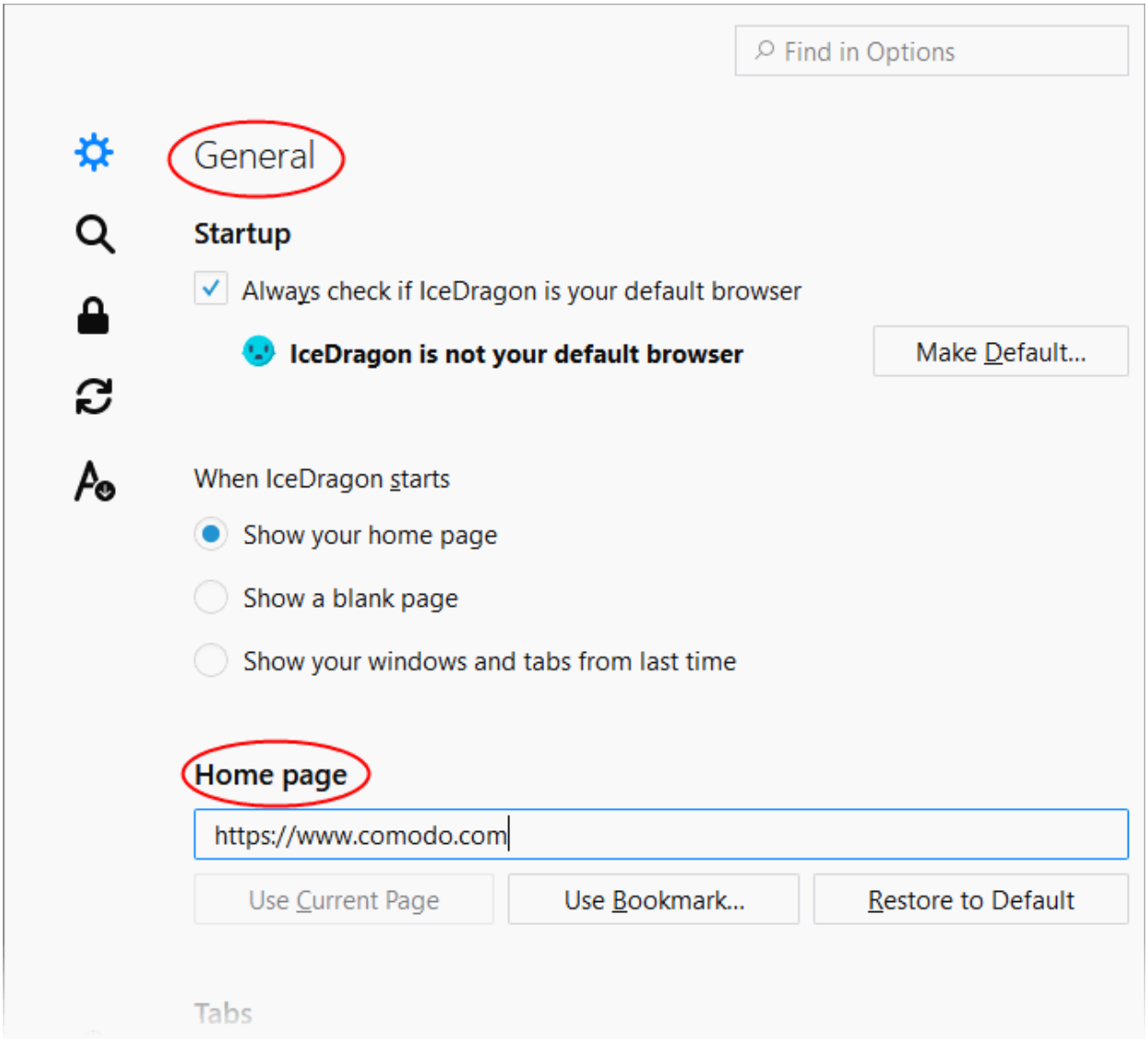
- Show your home page – Opens your home page every time you start Ice Dragon. See '**Configure Home page**' for more details on setting up your favorite web page as home page.
- Show a blank page – Ice Dragon will open at a blank page.
- Show your windows and tabs from last time - Opens the page(s) you had open at the end of your last browsing session.

Configure Home page

You can set your favorite web page as your home page using one of the following methods:

Manually

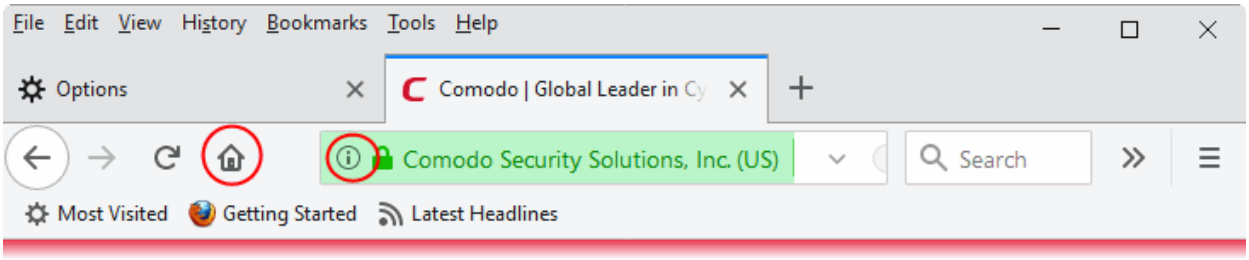
- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > 'General'
- Type the URL of your desired homepage in the 'Home Page' field:



From the currently displayed page

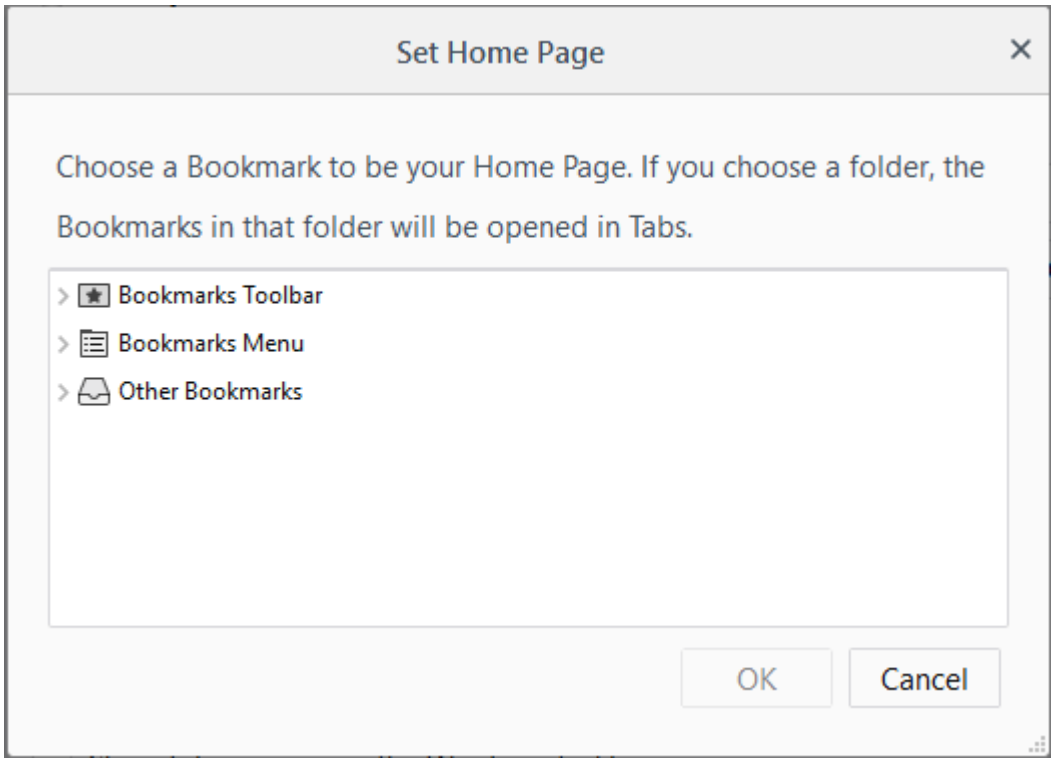
- Open the page you want to use as your home page in IceDragon
- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > 'General'
- Click the 'Use Current Page' button in the 'Startup' section

You can also set your home page by dragging the favicon or lock icon and dropping it onto the 'Home' button. The favicon/lock is the icon on the left of the website address bar.



From your bookmarks

- To select a web page from your stored bookmarks, click the hamburger/'Open Menu' button at the top-right corner then select 'Options' > 'General' and click 'Use Bookmark'.



- Select your favorite page from the list and click 'OK'.

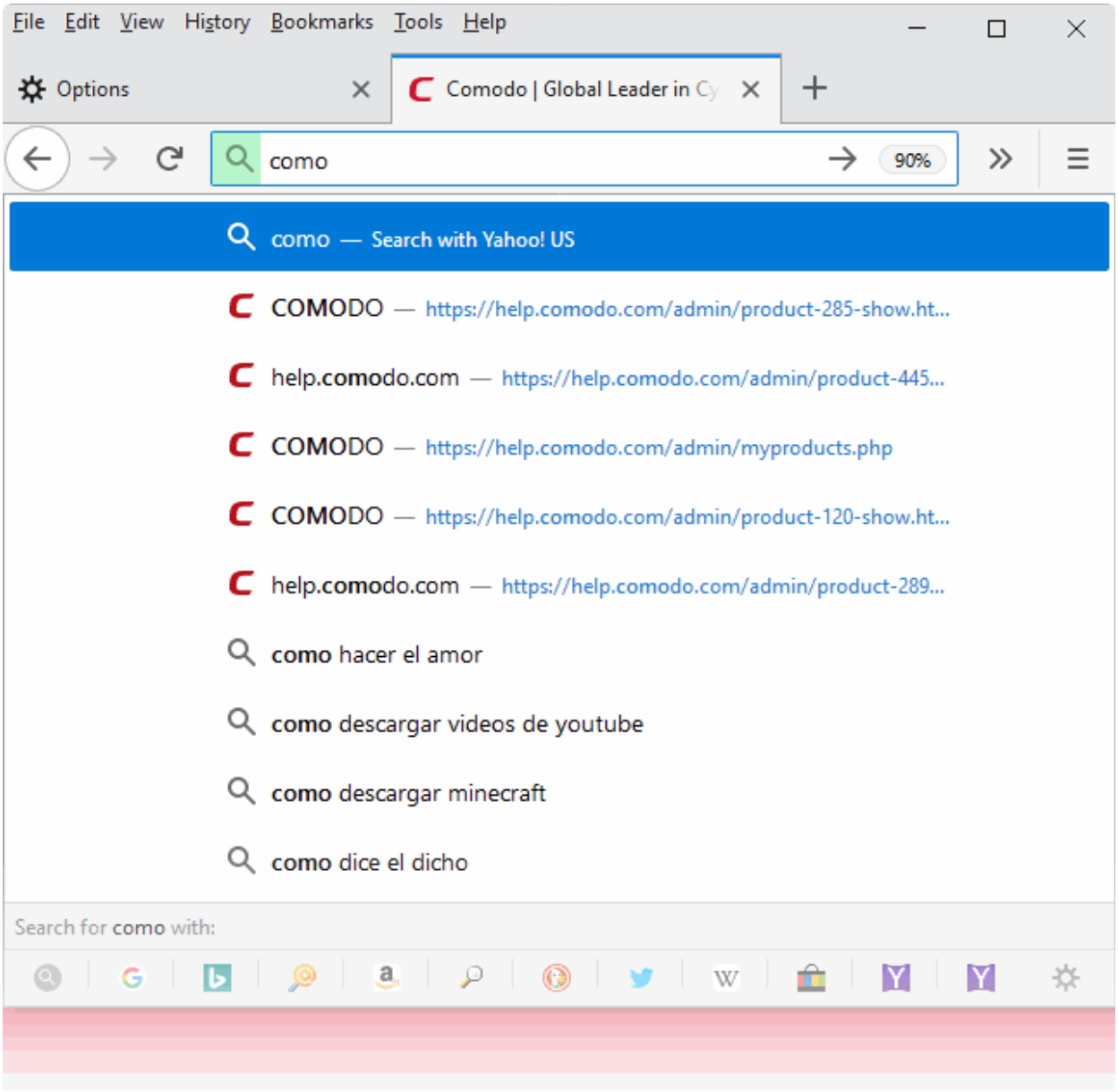
Set Default Home page

If you want to return to using Yahoo/Yandex as your home page, click the hamburger/'Open Menu' button at the top-right corner then select 'Options' and click 'Restore to Default'.

4.4. Search the Internet

The Comodo IceDragon address bar also serves as a search box. By default, keywords typed into the address bar will use Yahoo/Yandex as the search engine:

- Enter your keywords or phrases into the address bar.
- To search, click the arrow at the right side of the address bar or press 'Enter' on the keyboard.



- When you start typing a website address in the address bar, the browser automatically searches your browsing history and your bookmarks and, provides auto-complete suggestions from them. This allows you to easily find pages you have previously visited.
- You can change the default search engine as per your preference. Please see '**Change Search Options**' for more details.

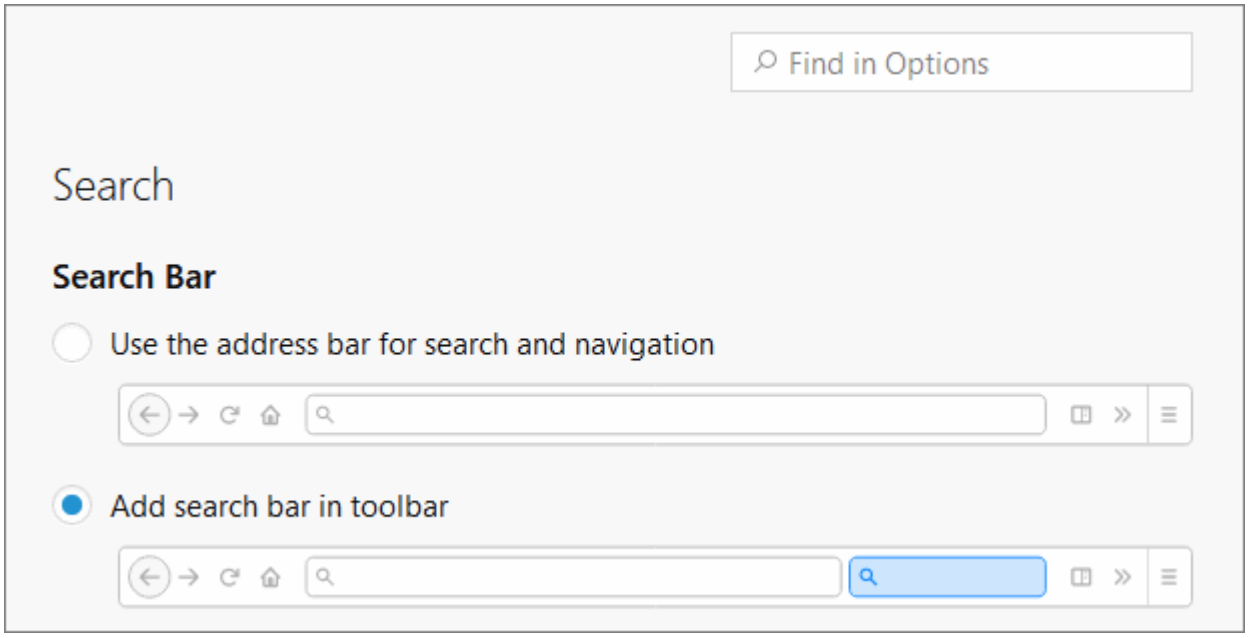
Click the links below for different ways to search the internet:

- **Search adding to address bar**
- **Search using the Search box in the navigation tool bar**
- **Search within a webpage**
- **the internet for a keyword from within a webpage**

Search adding to address bar

IceDragon lets you to split the search bar and address bar.

- Click the hamburger/'Open Menu' button at the top-right corner
- Select 'Options' > 'Search'
- Select 'Use the address bar for search and navigation' box or 'Add search bar in toolbar'

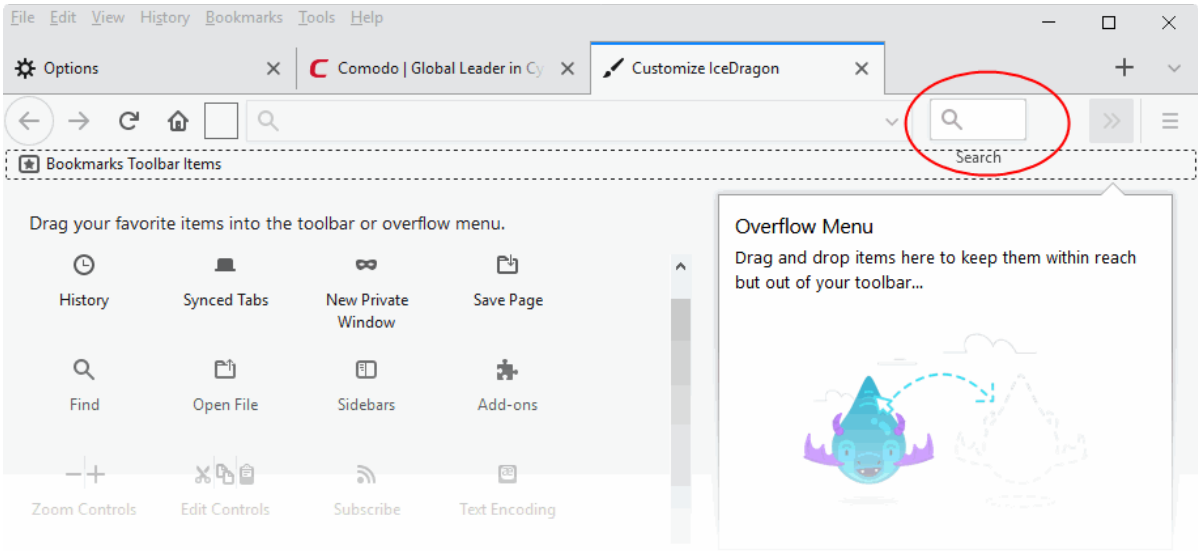


Search using the Search box in the tool bar

Comodo IceDragon can also display a dedicated search box to the right of the address bar. The search box is not displayed by default. To add it:

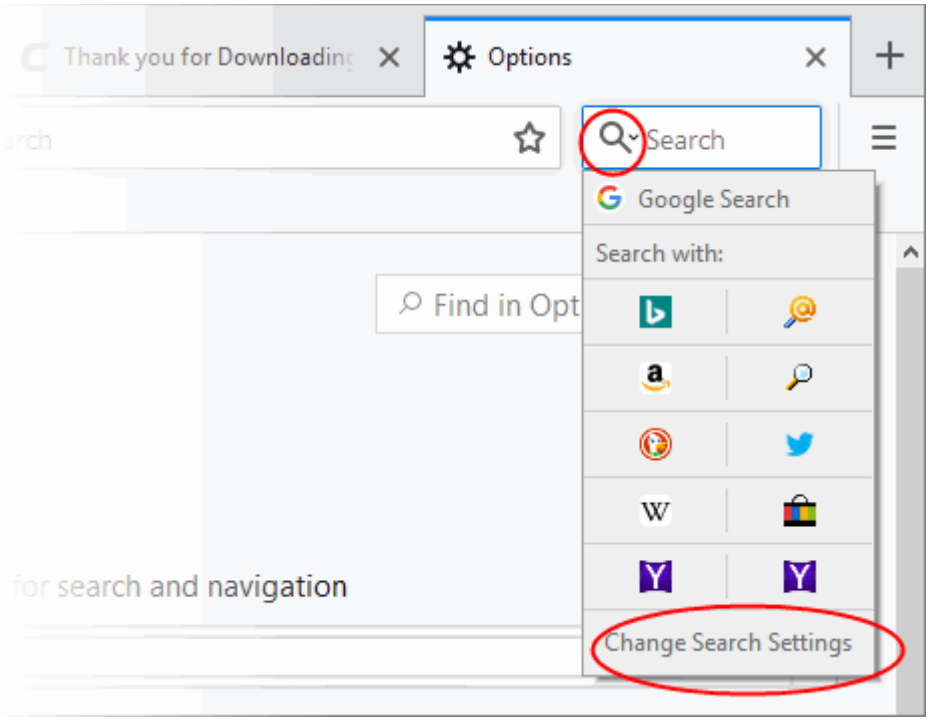
- Right-click anywhere on the file menu or navigation bar and select 'Customize'

  OR
- Click the hamburger/'Open Menu' button at the top-right corner then select the 'Customize' button



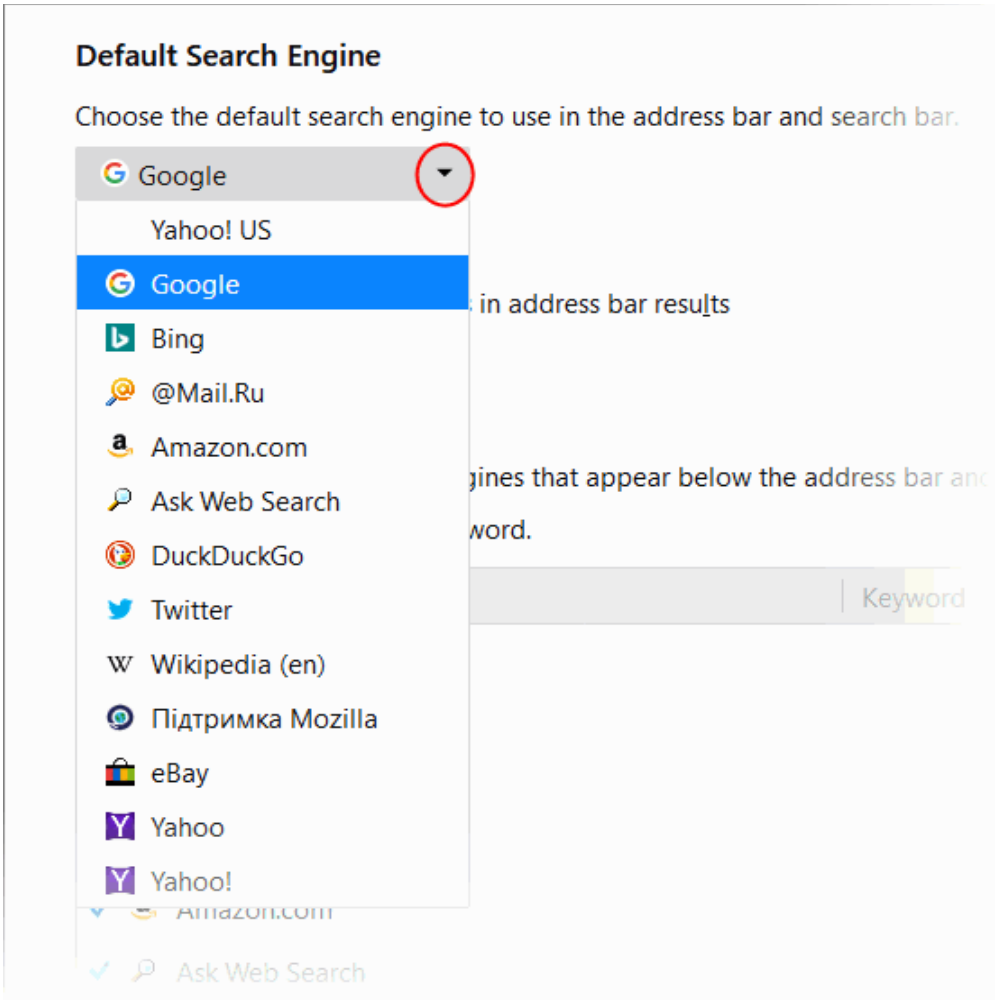
- This will open the 'Customize Toolbar' panel. This panel allows you to simply drag the items you want onto the navigation bar

- Drag the 'Search' box to the navigation tool bar.
- Click 'Exit Customize'. The search box will appear in the navigation tool bar.
- By default, the search box uses Yahoo/Yandex.
  - To change this, click the magnifying glass in the search bar and select 'Change Search Settings'.



By default, the search box uses Yahoo/Yandex.

- That will open the 'Default Search Engine' under the 'Search' tab in the 'Options' dialog with list of alternatives.
- Select your favorite search engine from the drop-down.



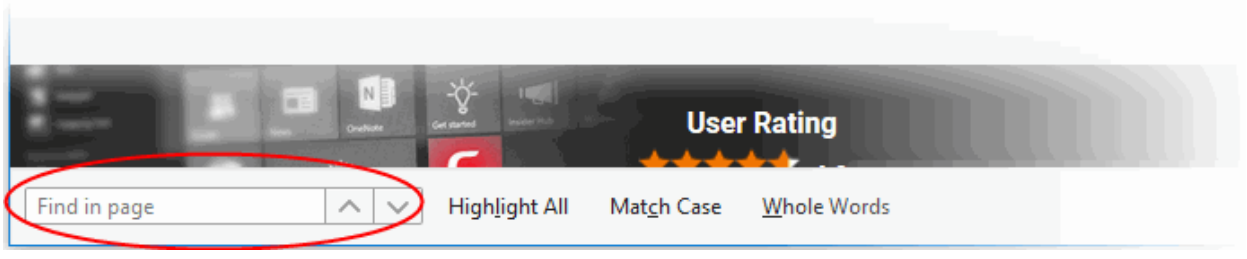
Search within a webpage

To search for a specific keyword/phrase from within a webpage:

- Click the hamburger/'Open Menu' button at the top-right corner then select 'Find in This Page'

  Or
- Press Ctrl + F on the keyboard.

A search box will appear at the bottom-right of the window:



- Enter your search phrase and press 'Enter'. The first occurrence of the phrase will be highlighted on the page.
- To find other occurrences, press 'Enter' again or use the up/down buttons beside the search box.
- If you want to see all occurrences, click 'Highlight All'.

Search the internet for a keyword from within a webpage

- Highlight the word/phrase using your mouse, right click and select Search <your default search engine > for "<selected keyword>".

- Highlight the word/phrase using your mouse, copy using right click options or pressing Ctrl + C and paste it in to the address bar or the search box.
- Highlight the word/phrase using your mouse and drag it and drop in the address bar or the search box.

Further reading related to the topic of this page:

- **Bookmarks**
- **View Browsing History**
- **Downloads**

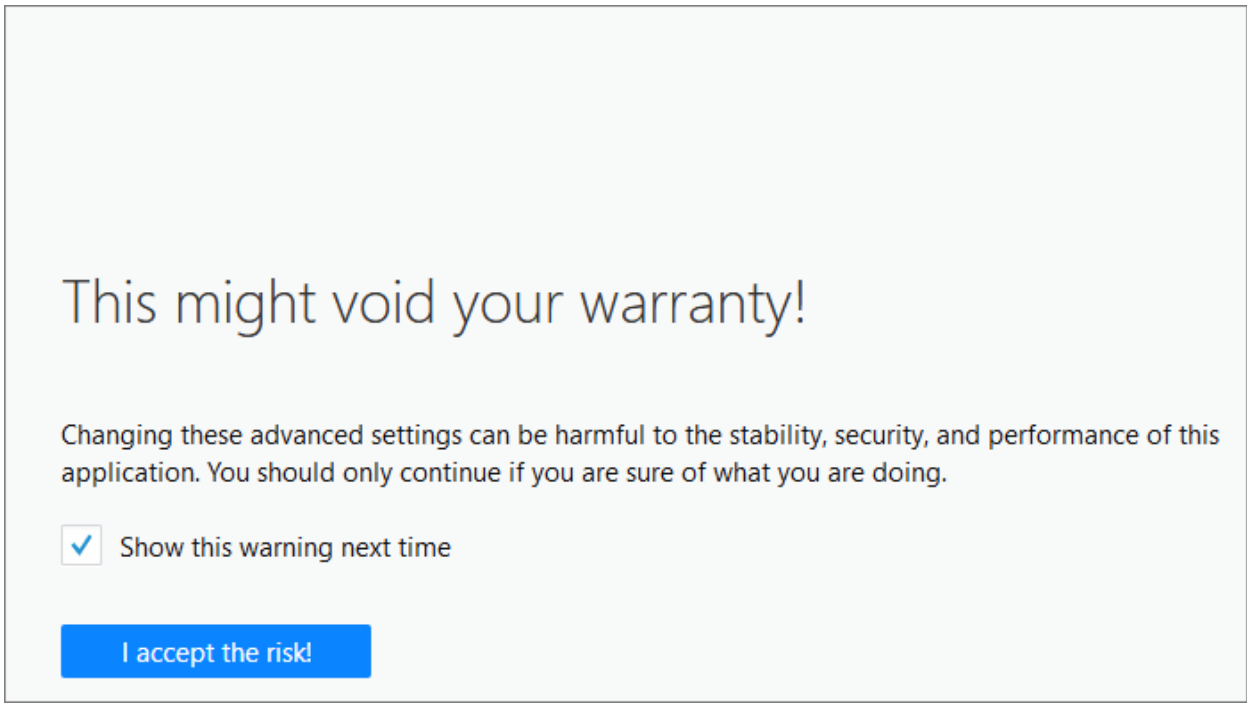
4.5. Change Search Options

- **Change the search engine used for keywords entered in the address bar**
- **Turn keyword search off**
- **Configure URL Suggestions**

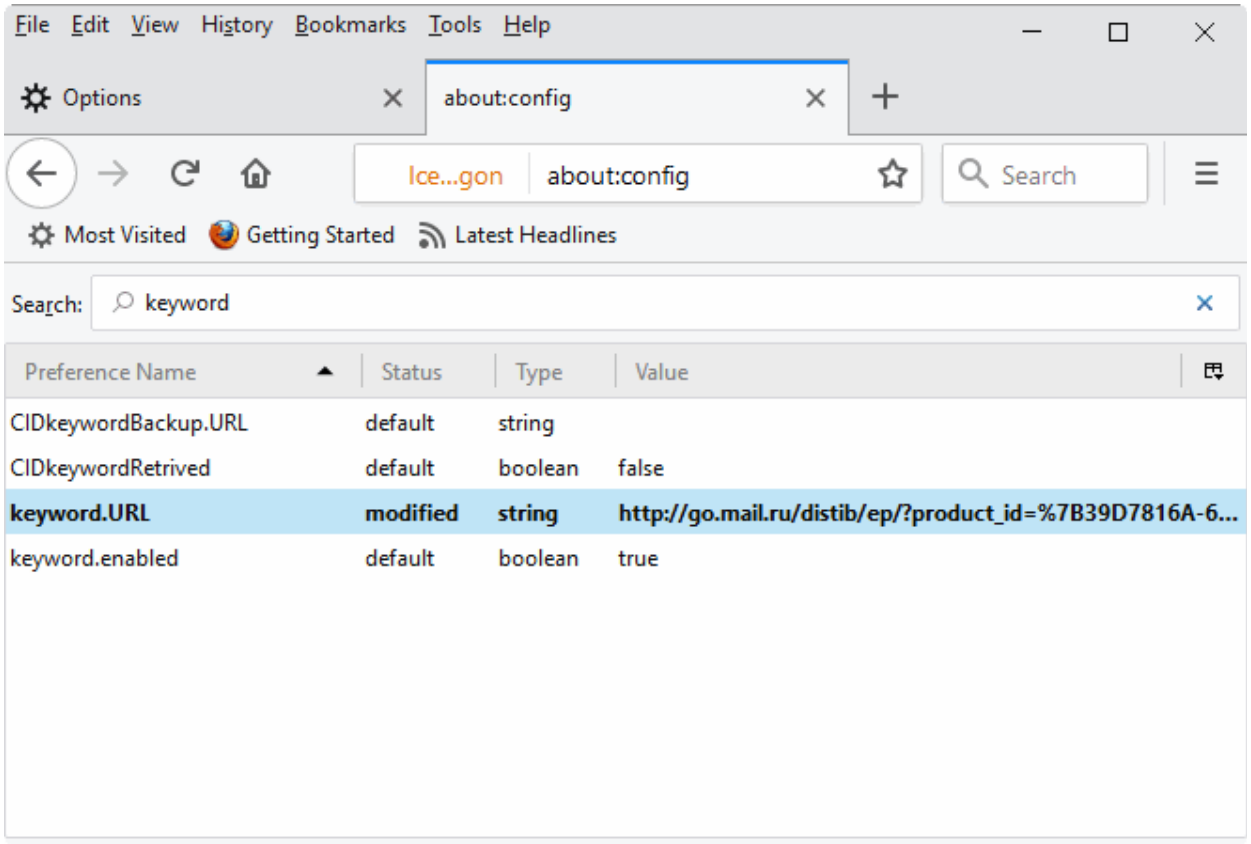
To change the search engine

- Type `about:config` in the address bar and press 'Enter'.

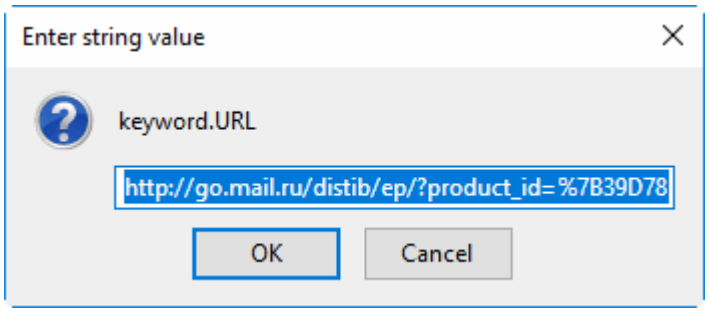
A warning will open:



- Click 'I accept the risk!'
- Type 'keyword' in the search field then double click in the **Keyword.URL** entry in the configuration page.



- Alternatively, right-click on Keyword.URL and select 'Modify'
- Type the URL of your desired search engine



Examples:

- To use Yandex Search engine, type “http://search.yandex.com/search?p=”
- To use Bing search engine, type “http://www.bing.com/search?q= ”
- To search Wikipedia for the keyword, type “http://en.wikipedia.org/wiki/”

- Click 'OK'
- To reset to Yandex search engine, erase the content in the **keyword.URL** dialog and click 'OK'

To turn keyword search off

- Type `about:config` in the address bar and press 'Enter' from the keyboard
- Click 'I accept the risk!' in the warning dialog to view the About Config page
- Type Keyword in the search bar to reach the item 'keyword.enabled'
- Double click on the item to change the value of the item to 'false'

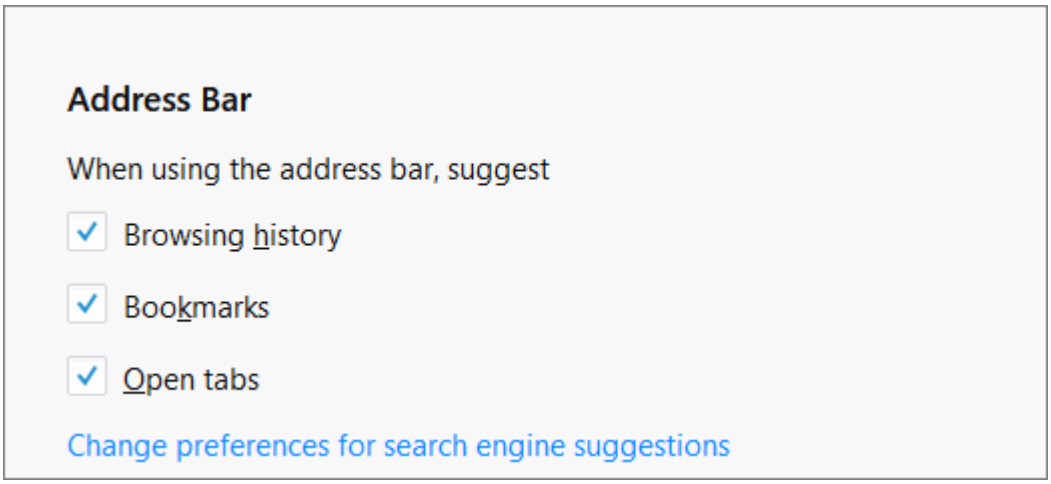
The keyword search from the address bar will be stopped. To enable the feature again, follow the same procedure to change the value to 'true'.

Configure URL Suggestions

Comodo IceDragon displays a list of suggestions as you start typing a URL in the address bar by searching matching strings from your browsing history and bookmarks. You can configure the items to be searched for providing suggestions.

To configure suggestions

- Click the hamburger/'Open Menu' button at the top-right corner.
- Click 'Options' > 'Privacy & Security'.
- 'Address Bar' - Leave all check boxes enabled to draw suggestions from your browsing history, bookmarks and open tabs.



Enable or disable search suggestions

You can enable or disable search suggestions in two ways:

- **through the Search bar**
- **through the Search engine**

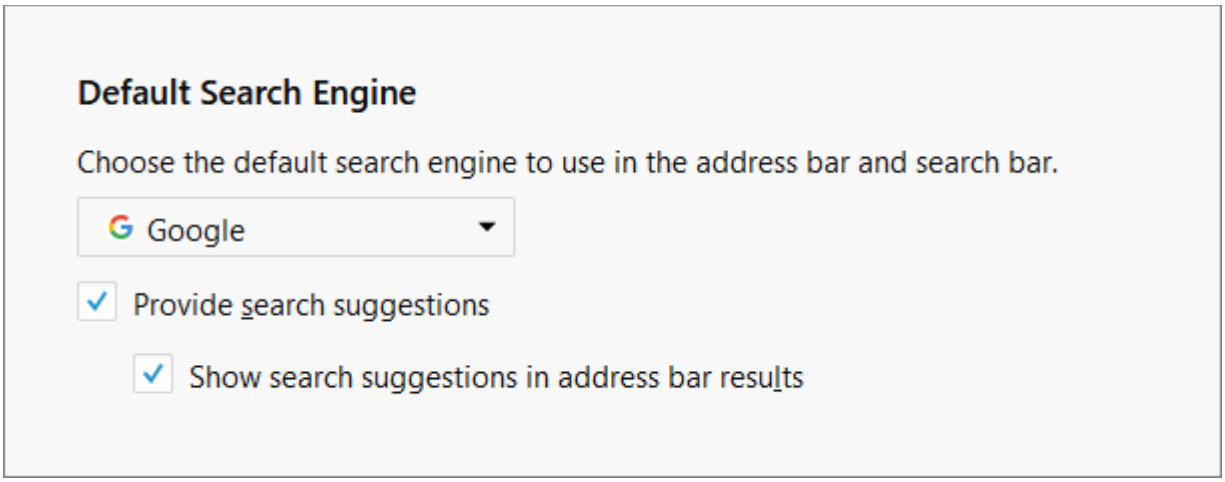
Enable or disable search suggestions through the Search bar

- Right-click on the 'Search' bar
- Click on a provider's logo to select another search engine

Enable or disable search suggestions through the search engines manager

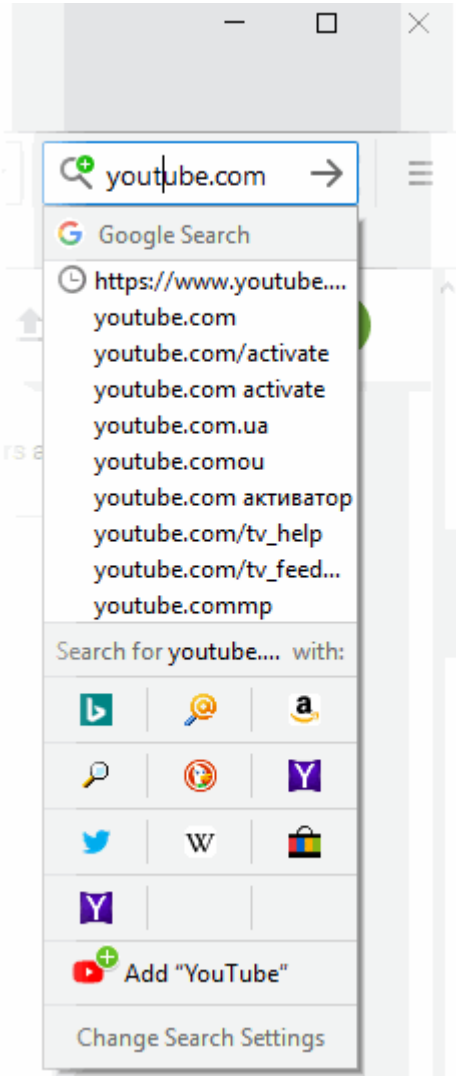
- Click the hamburger/'Open Menu' button at the top-right corner.
- Click 'Options' > 'Search' tab.

  OR
- Right-click on the 'Search' bar
- Click 'Change Search Settings' from the drop-down
- Select / deselect the check 'Provide search suggestions' box to enable / disable search suggestions.
  - Enable 'Show suggestion in location bar results' will also show suggestions when you search from the IceDragon address bar.

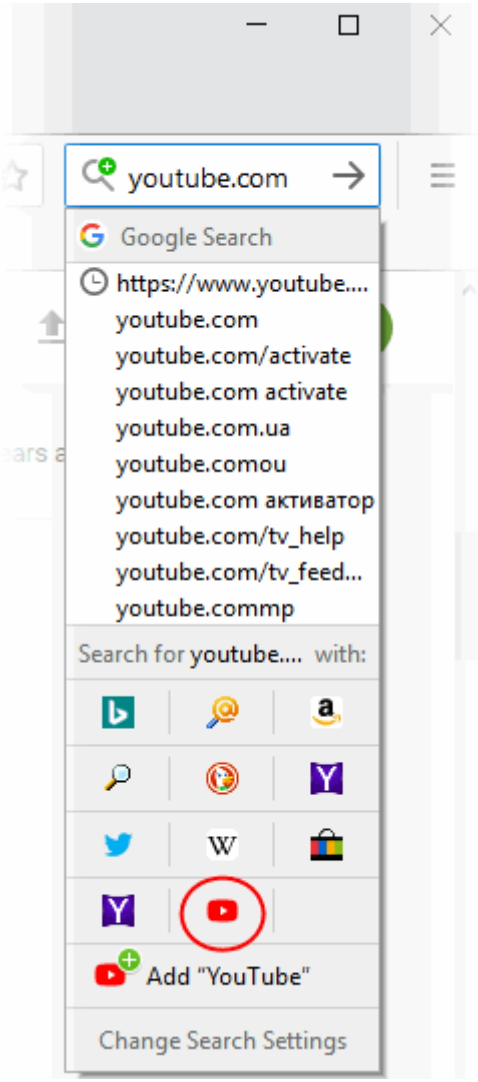


To add a specific search engines

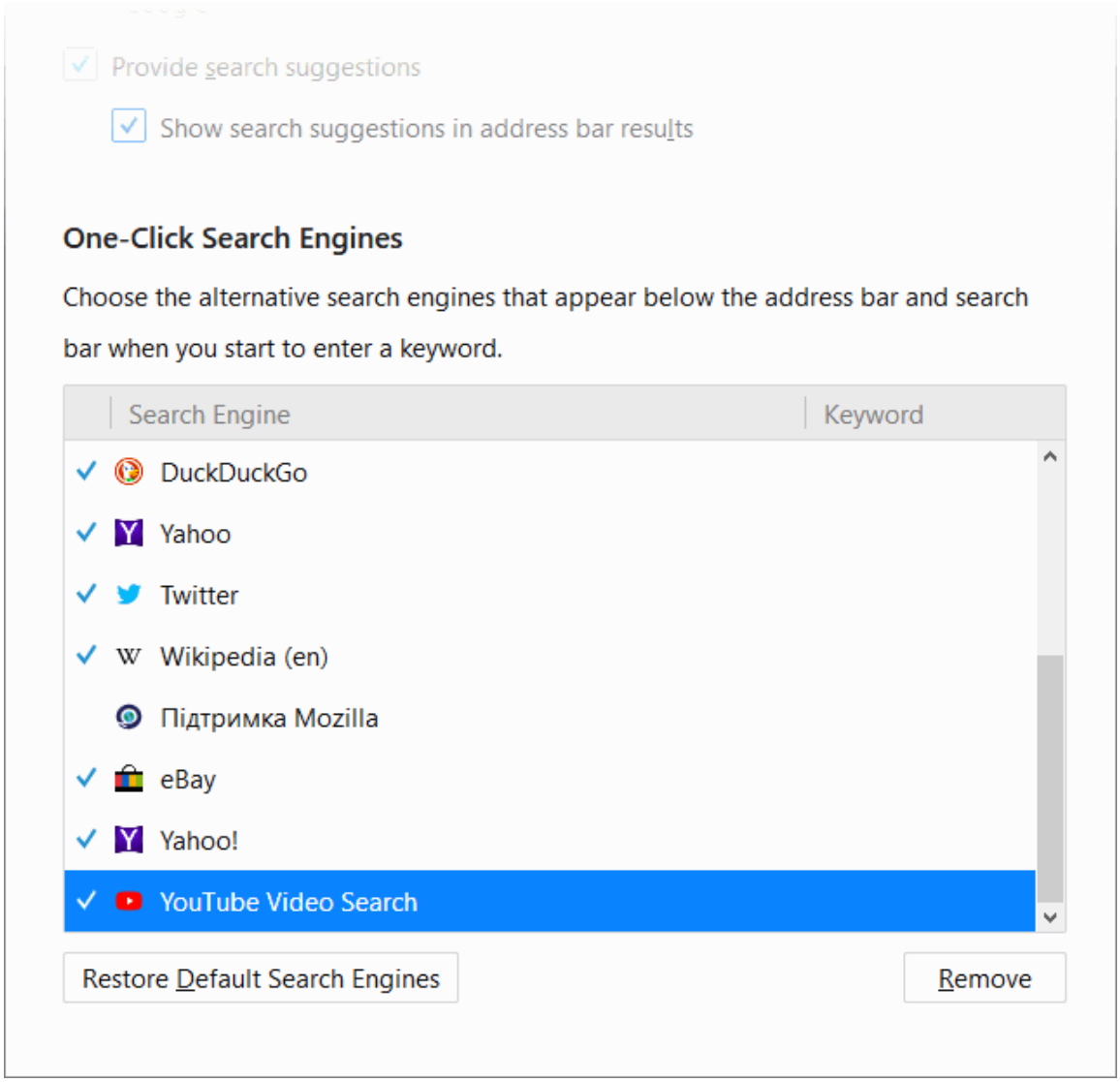
- Open the website
- Click on the magnifying glass on the 'Search' bar



It will appear in your built-in search options:



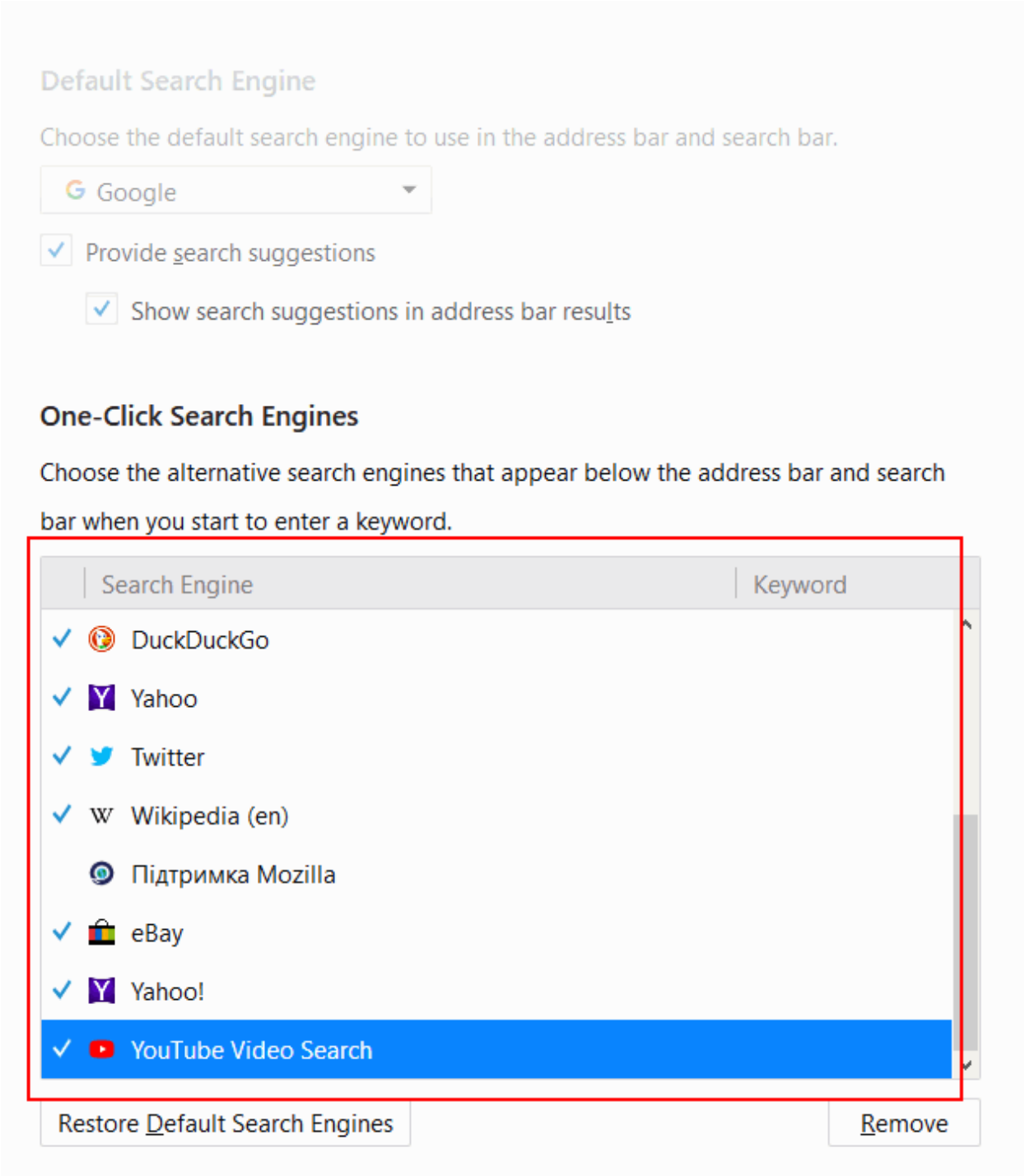
- And in your 'Default Search Engine' list.



To hide search engines

- Click the hamburger/'Open Menu' button at the top-right corner then 'Options' > 'Search' tab

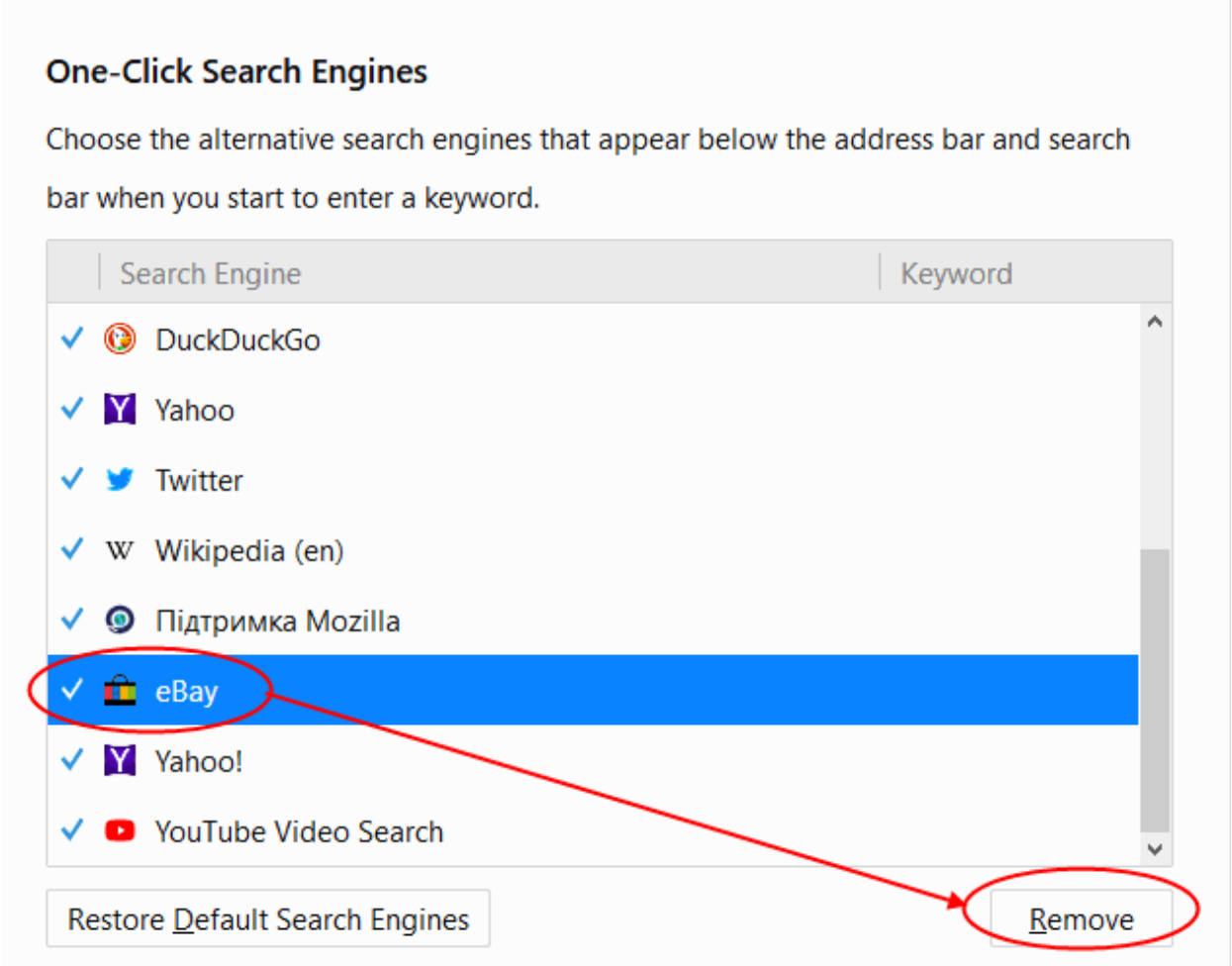
  OR
- Click on the magnifying glass in the 'Search' bar on your toolbar
- Click 'Change Search Settings'
- Uncheck the mark next to each search engine under the 'One-Click Search Engines'



To remove search engine

- Click the hamburger/ 'Open Menu' button at the top-right corner then 'Options' > 'Search' tab

  OR
- Click on the magnifying glass in the 'Search' bar on your toolbar and click the 'Change Search Settings '
- Select the search engine you are want to delete
- Click 'Remove' to remove from your list



- Click 'Restore Default Search Engines' to add a default search engine back to the list.

4.6. Customize the Toolbar and the Menu

The IceDragon toolbar contains shortcuts to items such as your homepage and bookmarks. The content of the toolbar is fully customizable.

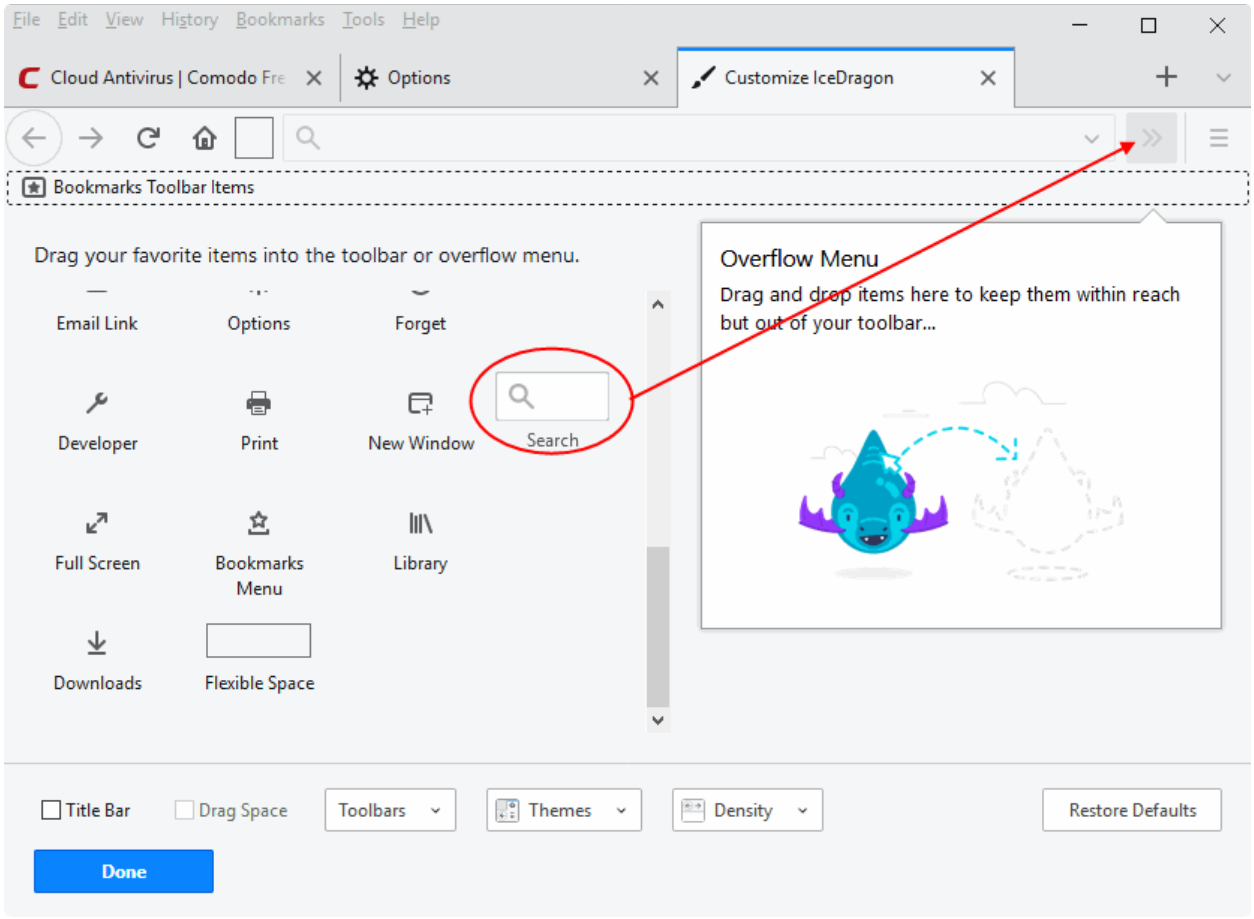
To add or remove items on the toolbar

- Right-click anywhere on the file menu or navigation bar and select 'Customize'

  OR

- Click the hamburger/ 'Open Menu' button at the top-right corner> 'Customize'

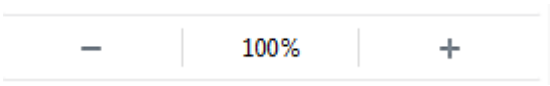
This will open the 'Customize Toolbar' panel. This panel allows you to simply drag the items you want onto the navigation bar.



- To add a tool, drag it from the dialog and drop on the toolbar. See **table below** for descriptions of icons
- To remove a tool, drag it from the toolbar and drop it into the 'Customize Toolbar' interface
- Click on the 'Title Bar' ti display or hide the title bar
- Check show / hide in the 'Toolbars' drop-down to configure visibility of the 'Menu Bar' or 'Bookmarks' toolbar
- To set a theme, click the 'Theme' drop down to 'Manage' or 'Get more Themes'. You will be taken to IceDragon *about:addons* or Firefox add-ons webpage
- Click 'Restore Default' to return IceDragon toolbars to their original state
- Click 'Done' for your settings to take effect.

Table of Icons and their Descriptions

Icon	Description
	Cuts the selected text from the form fields of the currently displayed page and copies to the clipboard
	Copies the selected text from the currently displayed page to clipboard
	Pastes the text in the clipboard to the selected form field in the current page

	Zooms out/Zooms in the currently displayed page
	Opens a new Comodo IceDragon window
	Opens a new private window
	Prints the currently displayed page
	Opens the History sidebar that show a list of recently visited pages
	Displays the current page in Full Screen view
	Find item in the current page
	Opens Options interface
	Opens Add-ons interface that shows a list of your Appearence
	Opens the web developers tools interface
	Inserts a search box to the navigation toolbar.
	Opens the Downloads dialog that shows the list of previous downloads and progress of the current download
	Enables subscription of RSS feeds from the currently displayed page.
	Switches the IceDragon window to Tab Groups view.
	Opens the Bookmarks window that shows a list of your bookmarks.

	Opens the Firefox market place
	Saves the currently opened page on html format
	Provides a quick access to the file from your computer
	Provides a quick access to the fonts Unicode ranges
	Opens a new Comodo IceDragon tab
	Opens the Bookmarks or History Sidebar
	Shares by an interesting web page through the email directly from the open IceDragon window.
	Shares links to webpages or specific items from a page

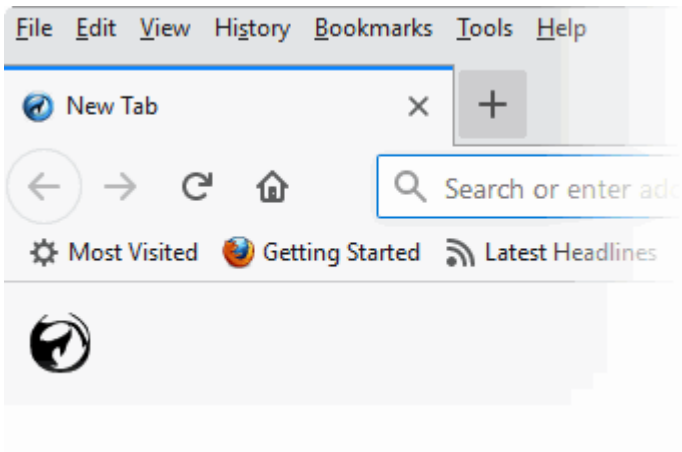
4.7. Open Recently and Most Visited Websites

If you accidentally closed a page without bookmarking and decide you need to see it again, then you can use the 'Most visited' and 'Recently Closed Tabs' features.

When you open a blank new tab in IceDragon, you will see thumbnails of your most visited sites so you can quickly re-open them.

To view recent and most visited websites:

- Click the + icon at right of your open tabs:



A tab will open containing thumbnails of your fifteen most visited sites.

To set the browser displays the most visited sites

- In the address bar, type `about:config` and click 'Enter'. "This might void your warranty!" warning page will appear
- Click 'I accept the risk!
- Type **browser.newtab.url**
- Double-click on it

  Or
- Right-click he string value > 'Modify'
- Change the value to *about:newtab* and click 'OK'.

To disable the browser displays the most visited websites

- In the address, type a`about:config` and click 'Enter'. "This might void your warranty!" warning page will appear
- Click 'I accept the risk!
- Type **browser.newtab.url**
- Double-click on it

  Or
- Right-click on the string value > 'Modify'
- Change the value to *about:blank* and click 'OK'
- To view recently closed tabs, click the hamburger/ 'Open Menu' button at the top-right corner then select 'History'
- To open all recently closed tabs in a new tabbed window, click the hamburger/'Open Menu' button at the top-right corner then select 'History' and select 'Restore Closed Tabs'.

Further reading related to the topic of this page:

- **Use Use Tabs**
- **CustomizieYour 'New Tab' Page**

4.8. View Browsing History

Comodo IceDragon will store a log of web pages that you have visited for the past 10 weeks. From time to time you may find it useful to look back through your history in order to revisit a particular site.

Please note, that Comodo IceDragon stores your browsing history only when it is used in standard mode and not in Private Browsing mode.

Also, it does not store your browsing history when visiting secure websites. Comodo IceDragon also makes it easy for you to manually delete your browsing history and thus further safeguard your privacy. See **Delete your Browsing History** for more details.

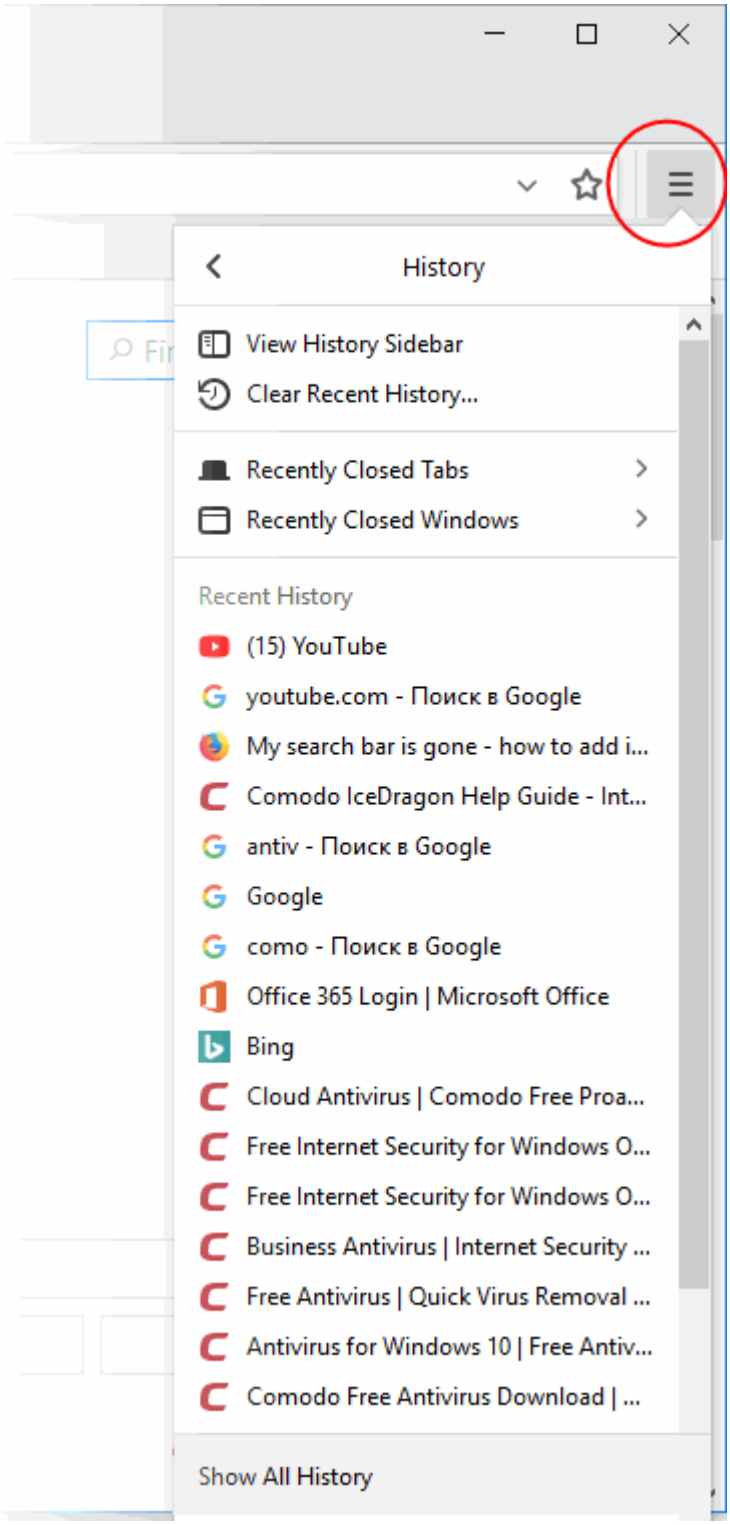
This section explains how to view your browsing history.

- **View a quick list of past fifteen pages**
- **View full browsing history**

To view a quick list of your browsing history

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Library' > 'History'.

A list of web pages that you have browsed in the recent past will be displayed.



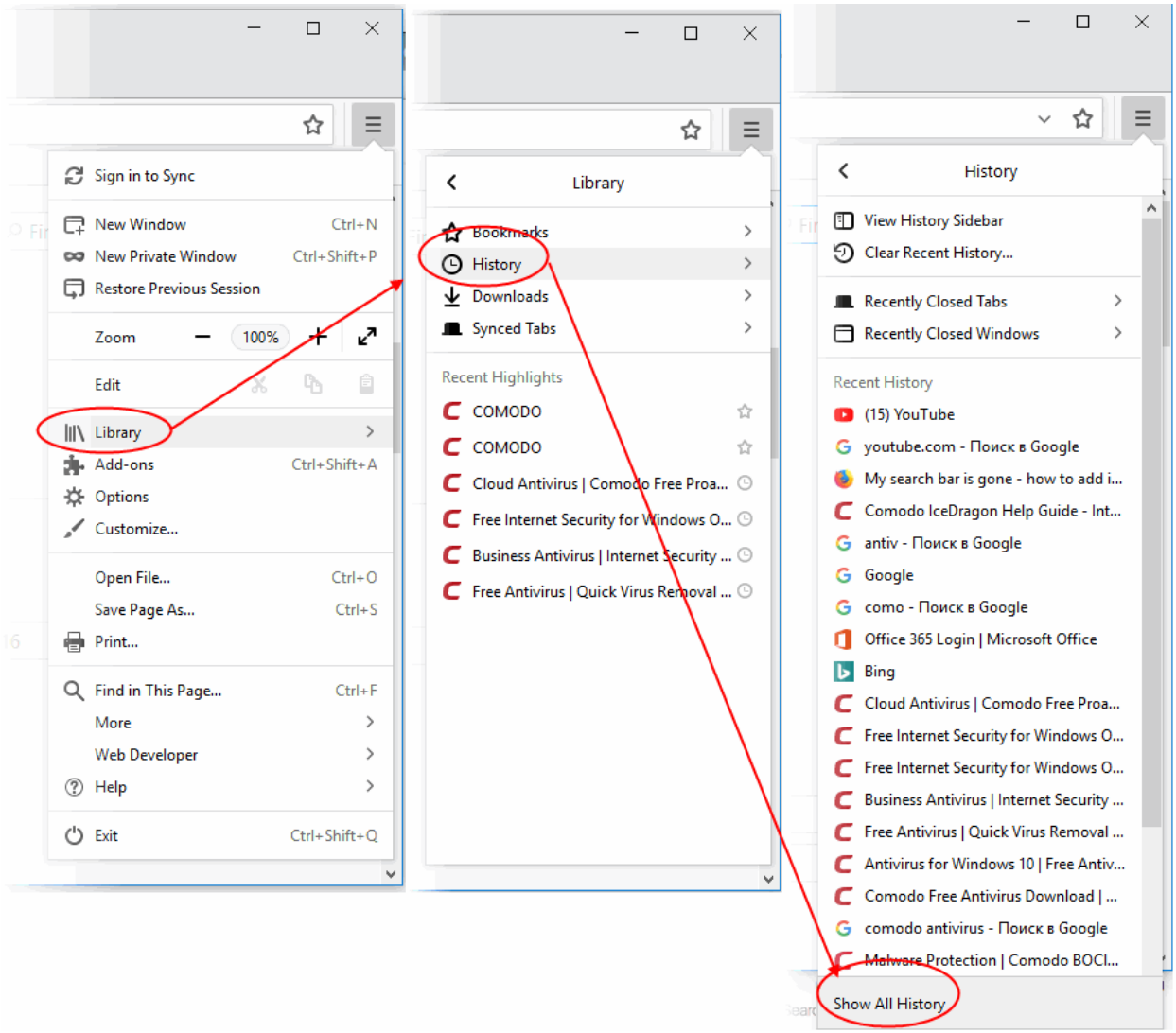
- Click on the page you want to re-visit.

You can also see the pages that you have visited in your present browsing session by clicking and holding down the forward and backward arrows adjacent to the address bar. Hover over a result and release the mouse key to switch to that page.

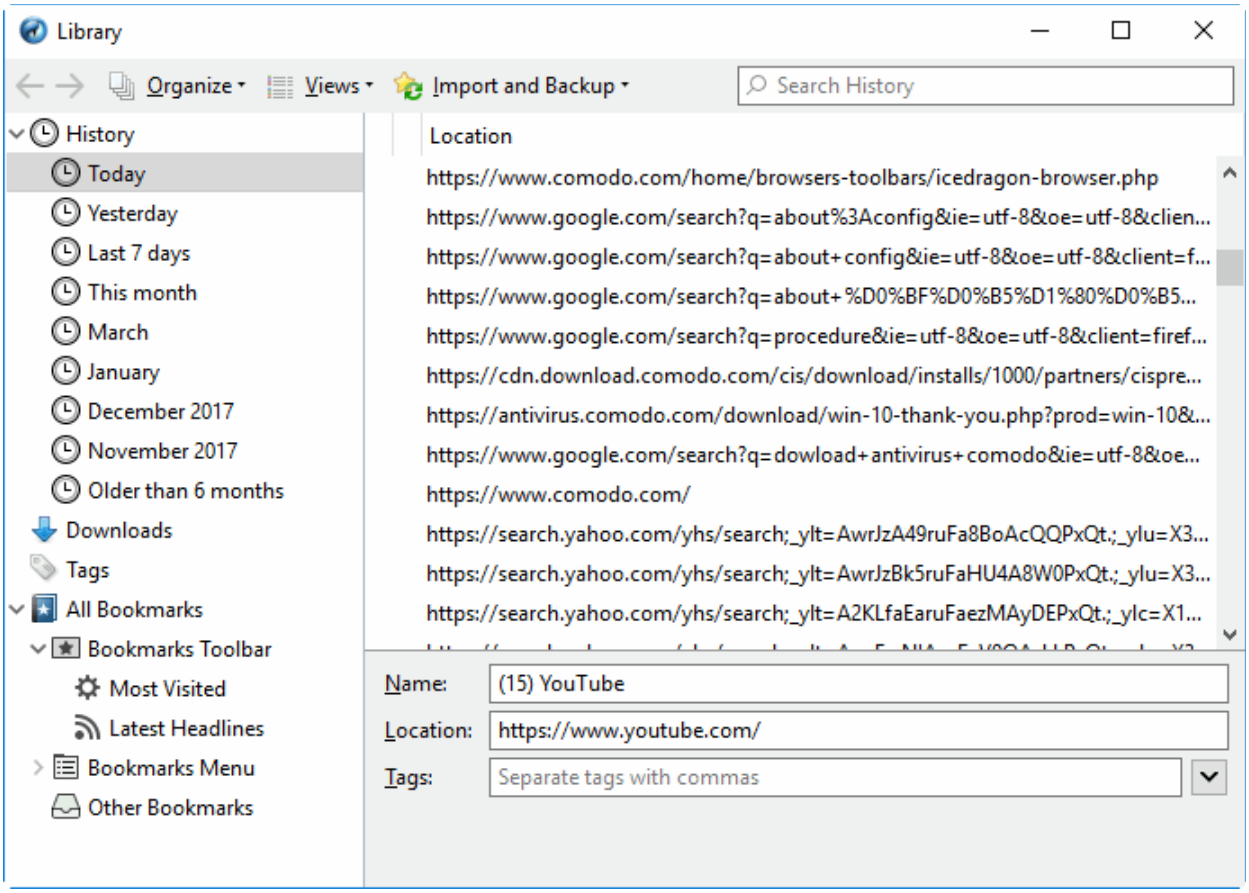
View full browsing history

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Library' > 'History' > 'Show All History'.

A library window will open:



Double-click on the time period for which you want to see the browsing history. You can choose from yesterday, the previous week and previous months.



The list of visited pages for that time period will be displayed.

- Double click on the webpage you want to re-visit.

Further reading related to the topic of this page:

- **Delete Browsing History**
- **Use Tabs**

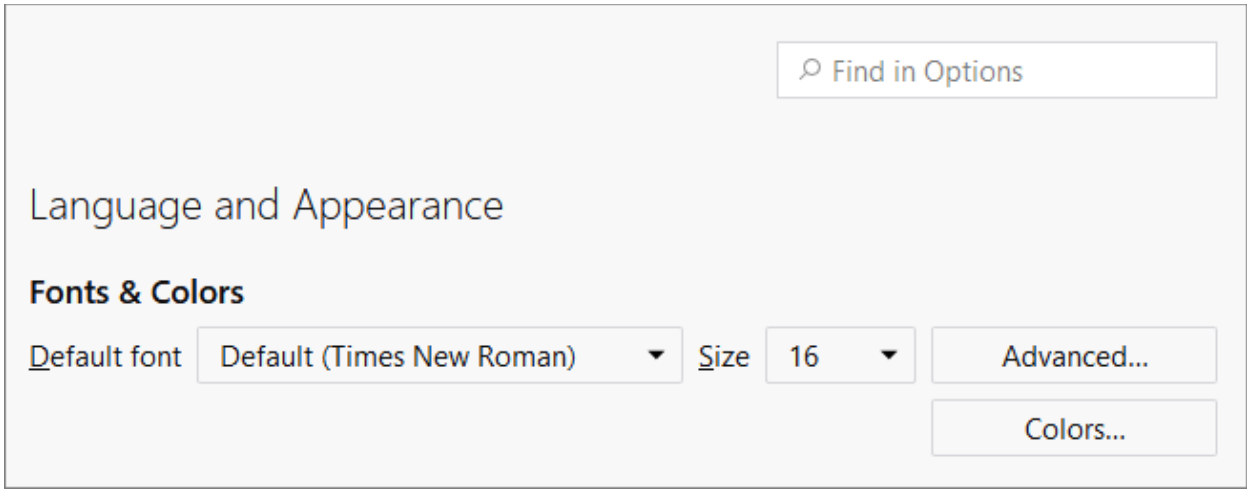
4.9. Set Fonts, Languages and Encoding

Comodo IceDragon lets you change the way web pages are shown on your screen. You can configure the fonts, color and language of page content.

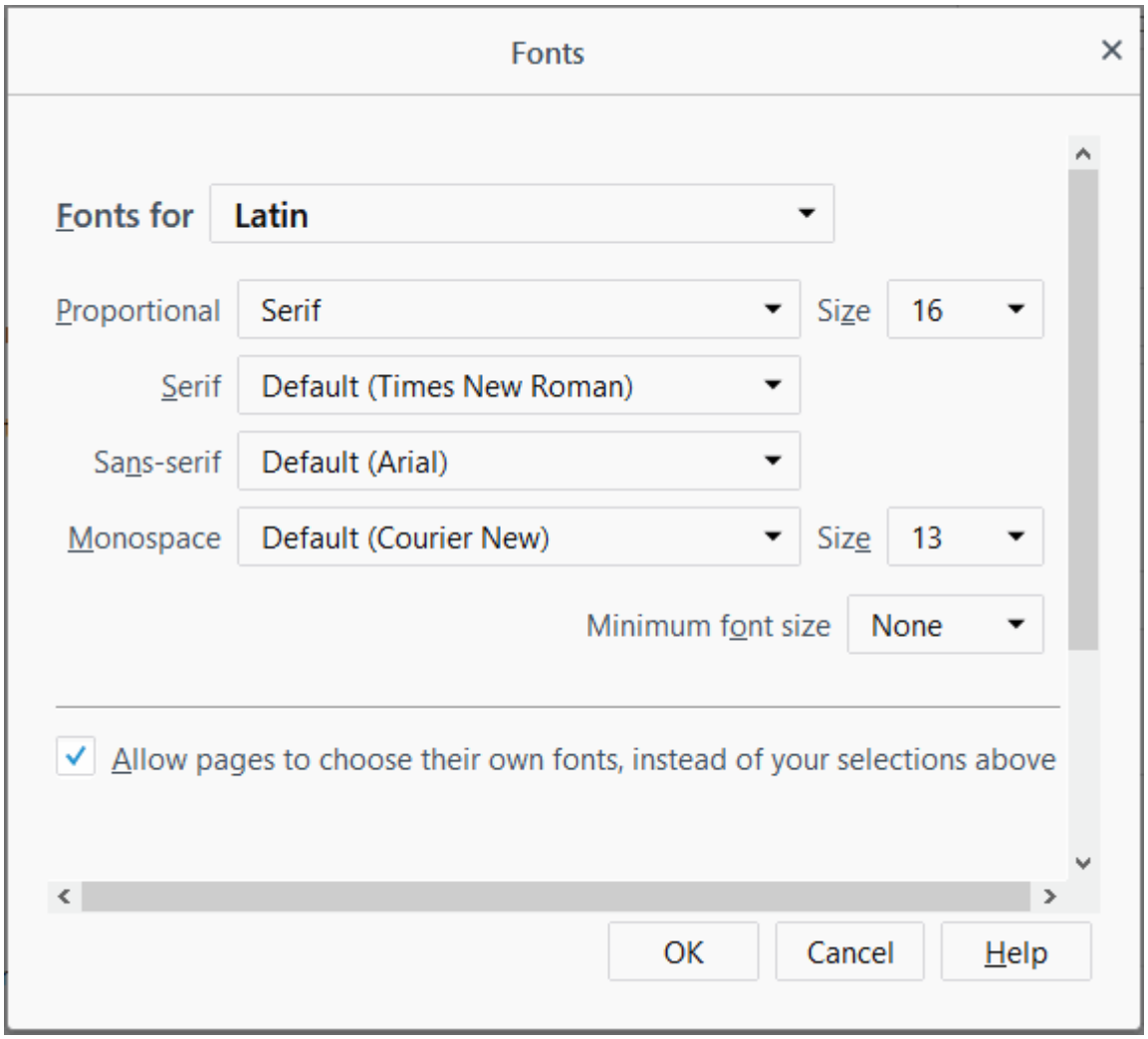
- **Configure fonts and colors**
- **Configure language**

To configure fonts and colors

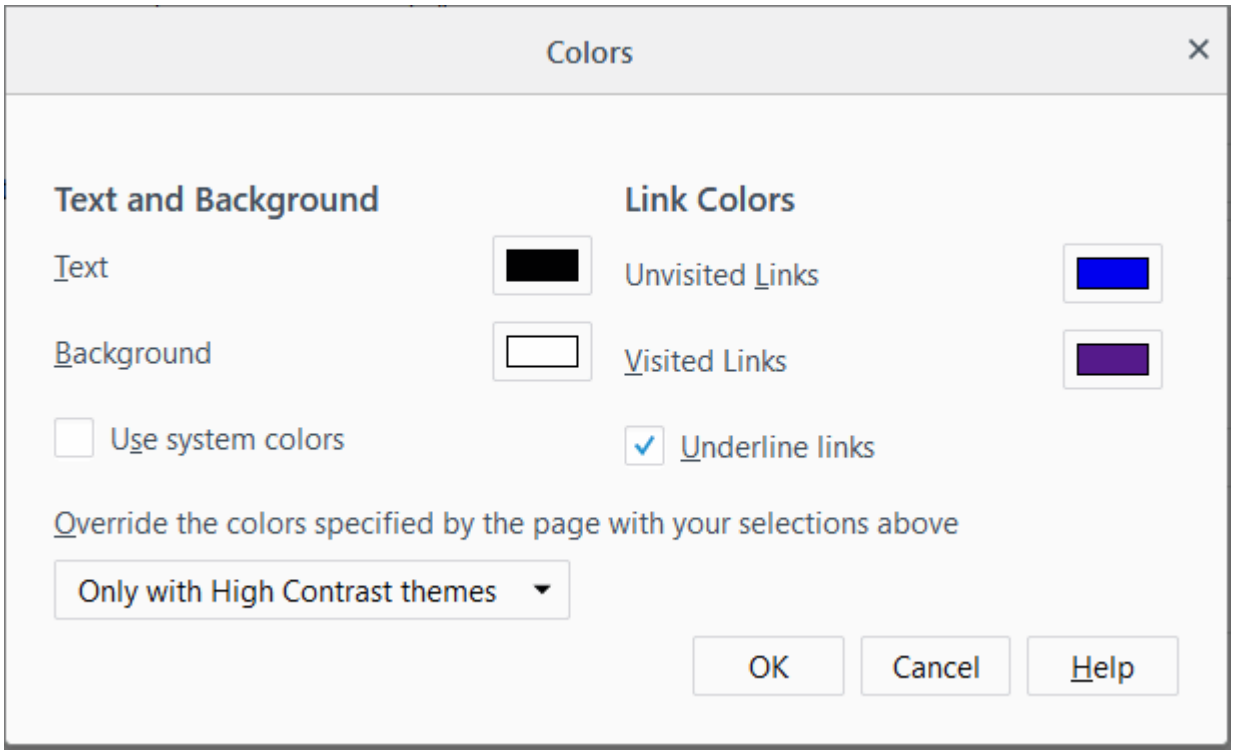
- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' > 'General'
- Click the 'Default fonts' drop-down under 'Fonts & Colors' then select the font and font size that you want the browser to display.



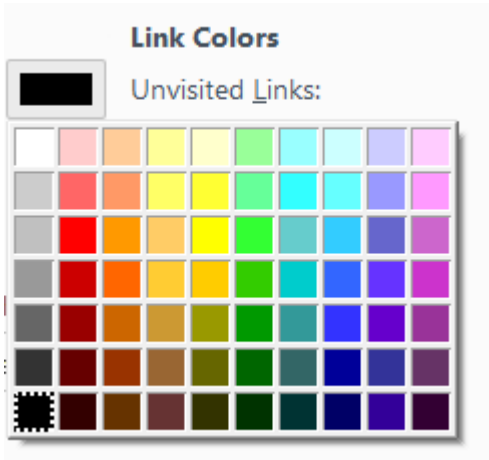
- Click 'Advanced' next to the font options to open a new box with detailed choices for configuring fonts.



  - Deselect the check box 'Allow pages to choose their own fonts, instead of my selections above', to disable the browser from using the fonts and colors as set by the websites and to display the pages with your font/color choices.
  - To change the character encoding language, click the 'Fallback Text Encoding' in the 'Text Encoding for Legacy Content' drop-down.
- Click 'Colors' beneath the 'Advanced' button to open the colors interface box.



- Click on the color patch and select the desired color from the palette to change the colors in which the text, background and links will show.

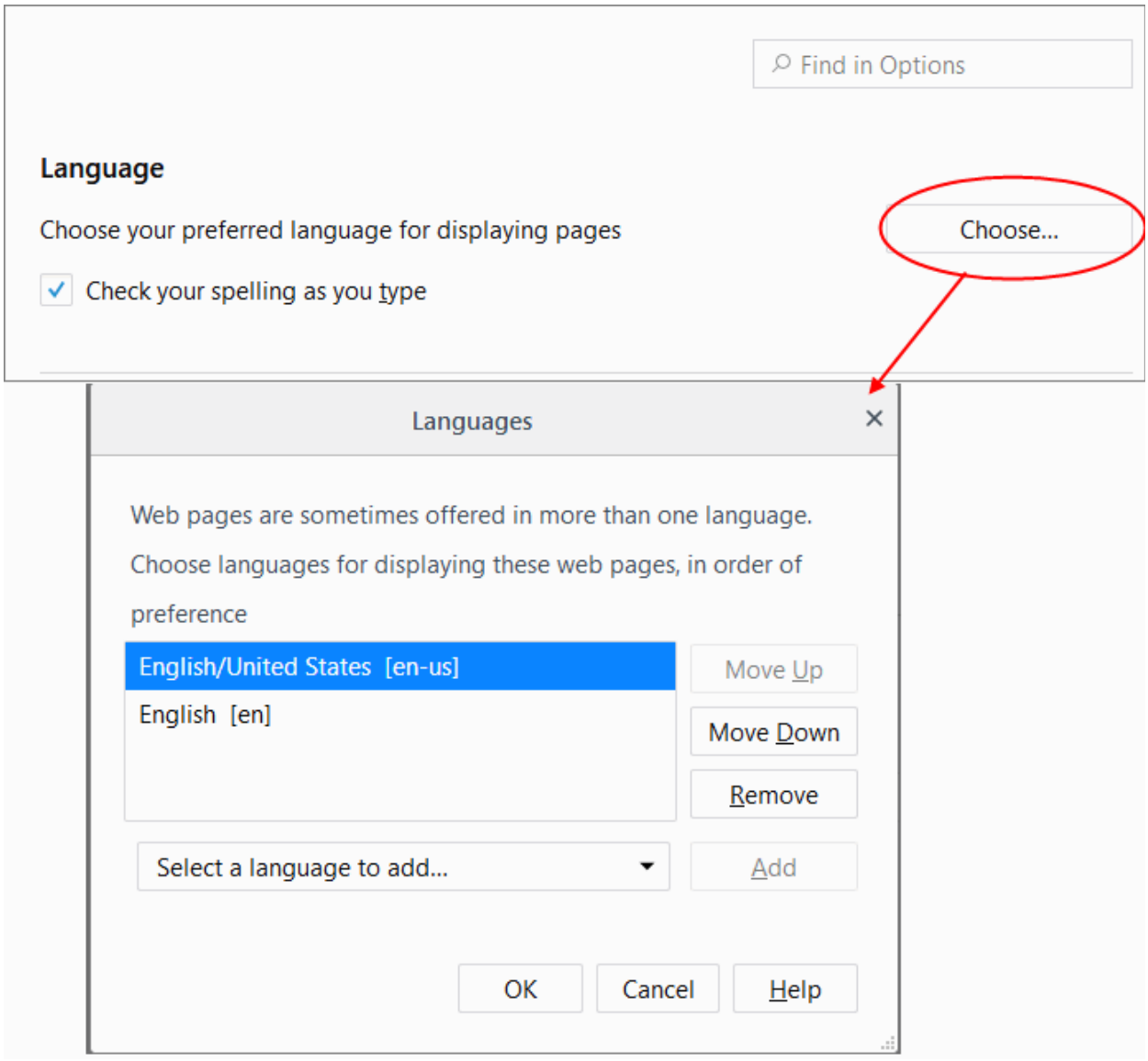


- 'Override the colors specified...' - will force web pages to use your display settings when rendering pages. This is especially useful for people with visual disabilities.

To configure the language

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' then 'General'
- Click 'Choose' button under the 'Language' section.

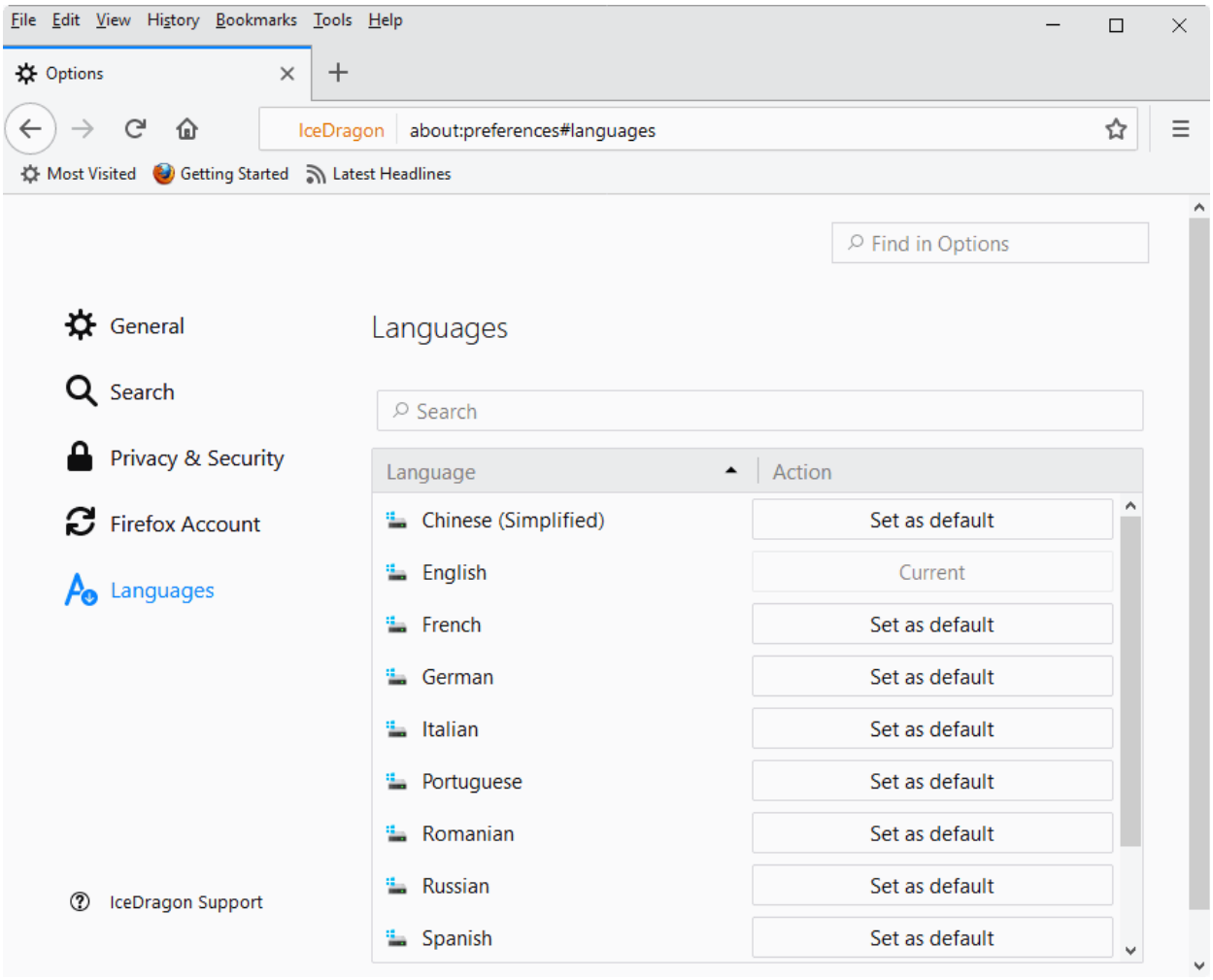
The 'Languages' screen:



- The languages that are currently added to the browser are listed in the order of their usage preference.
- To add a new language to the browser, click the drop-down button beside 'Select a language to add...', select your desired language from the drop-down, click 'Add'.
- To change the order of preference of languages to be used by the browser, select the language and use 'Move Up' and 'Move Down' keys.
- To remove a language from the browser, select the language and click 'Remove'.
- Click 'OK' for your changes to take effect.

To set a language as your a default

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' > 'Languages'



- Select the language and click 'Set as default'
- Click 'OK' to restart IceDragon for the settings to take effect.

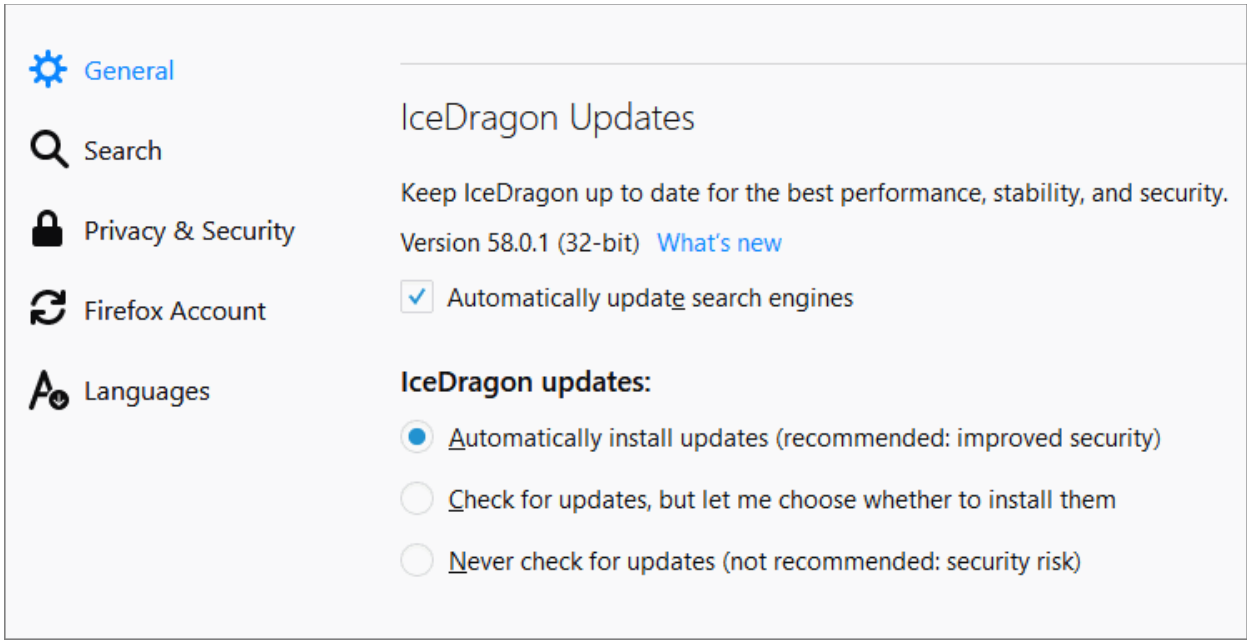
4.10. Configure IceDragon Updates

To make sure you benefit from the latest feature and security updates, Comodo IceDragon automatically downloads updates when it detects that a new version of the browser is available.

- By default, the updates will be downloaded in the background and installed automatically when one is available or when you restart IceDragon.
- The notification to restart IceDragon and install the update will be displayed if the updates has been waiting to be installed for more than 24 hours.

To configure updates automatically

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Options' > 'General' panel.
- 'IceDragon Updates' - Select 'Automatically update search engines' to receive automatic updates to your search engines. Enabled = default.



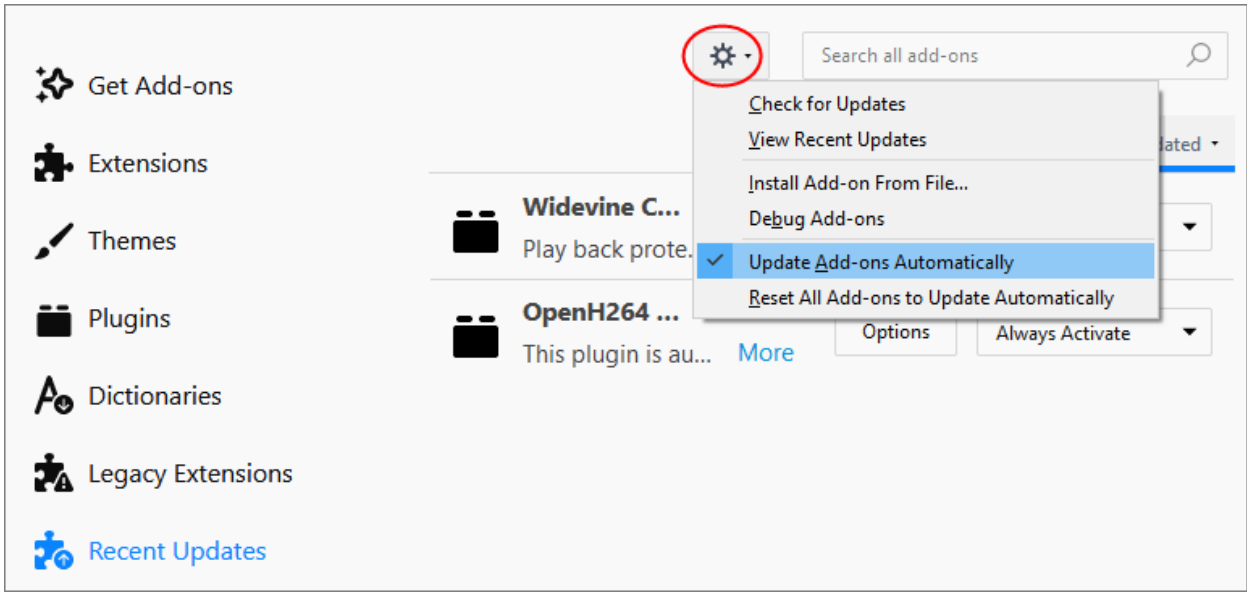
If automatic updates are disabled then IceDragon will not silently install updates. Instead, you will be alerted when updates are available via the notification bar.

To configure updates manually

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Options'
- Click the 'IceDragon Updates' panel under the 'General' tab
  - Check the 'Automatically install updates (recommended: improved security)' box to automatically downloads and installs updates
  - Check for updates, but let me choose whether to install them to choose a moment when to download and install updates. You can download them at a later time, if you do not choose to do that
  - Never check for updates (not recommended: security risk) to will not check for updates. *Note:* If this setting is selected, it will disable you from receiving critical security updates that may keep you safe online unless you frequently do a manual check for updates.

You can configure updates for add-ons and extensions by clicking the hamburger button at top-right then 'Add-ons' > 'Extensions'.

- Click the gear icon then select 'Check for Updates' or 'View Recent Updates'.

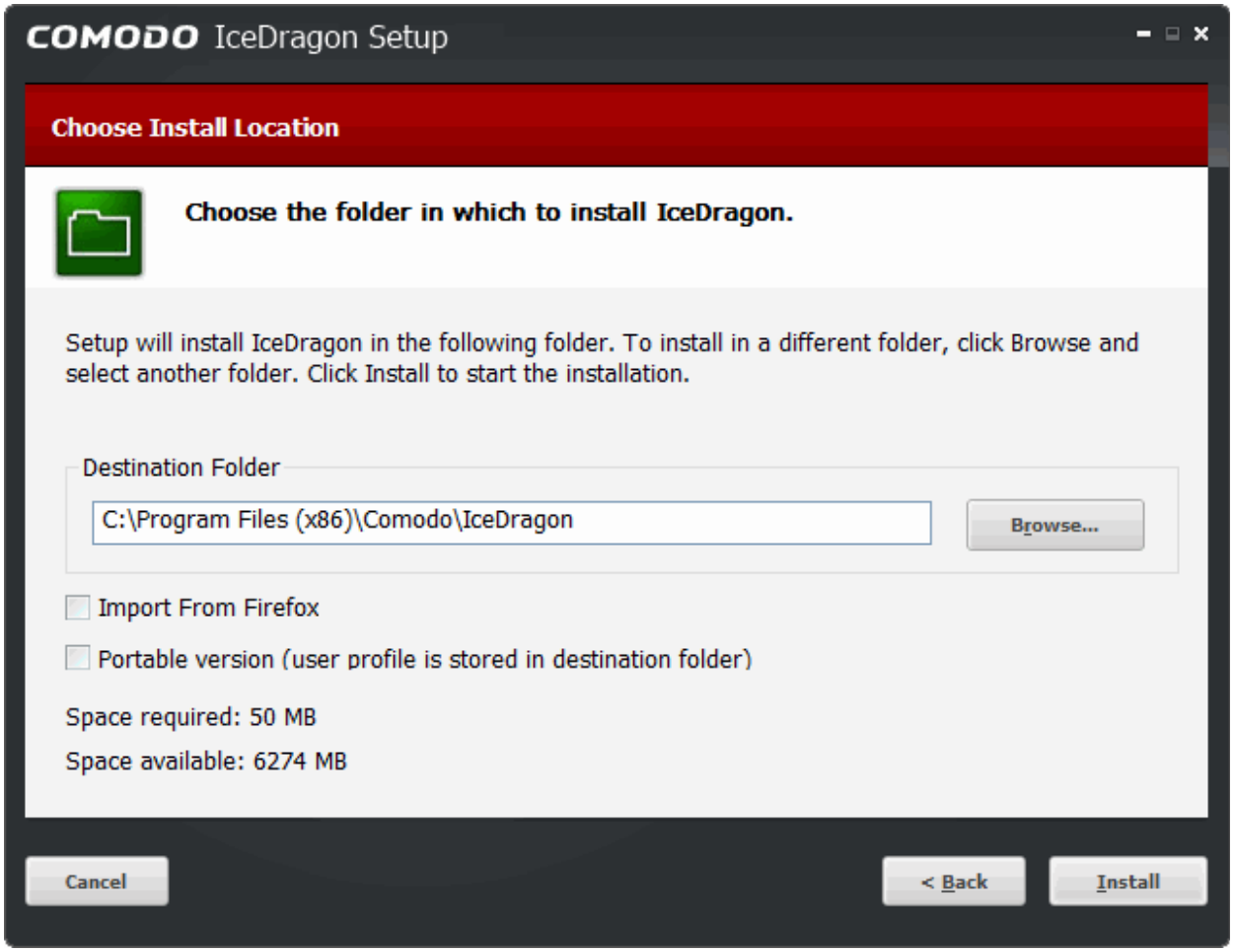


4.11. Portable Version

Comodo IceDragon can also be installed in portable mode. As the name suggests, portable mode allows users to quickly launch and use their pre-configured Comodo IceDragon on any computer without the need to install, import bookmarks or modify settings.

In portable mode, the user profile (configuration data) is written to the IceDragon installation folder instead of the Windows 'user' folder on the local machine. Therefore, by simply copying the installation folder to another drive (such as a USB fob or a drive on another computer), you will be able to launch and use your personalized Comodo IceDragon.

Portable mode must be selected during the installation process:



There are a few differences to setup if portable mode is selected:

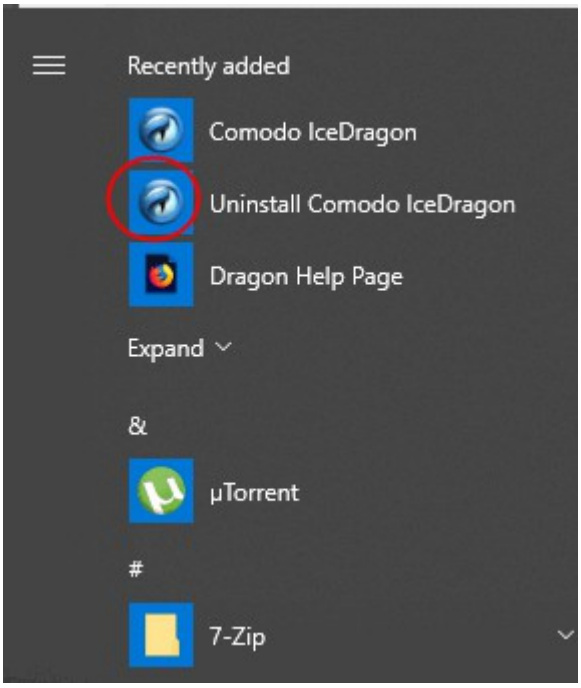
- The Installer does not write anything to the Windows registry
- Uninstaller is not created
- User profile is stored in the "User Data" folder inside the main Comodo IceDragon installation folder.

4.12. Uninstall IceDragon

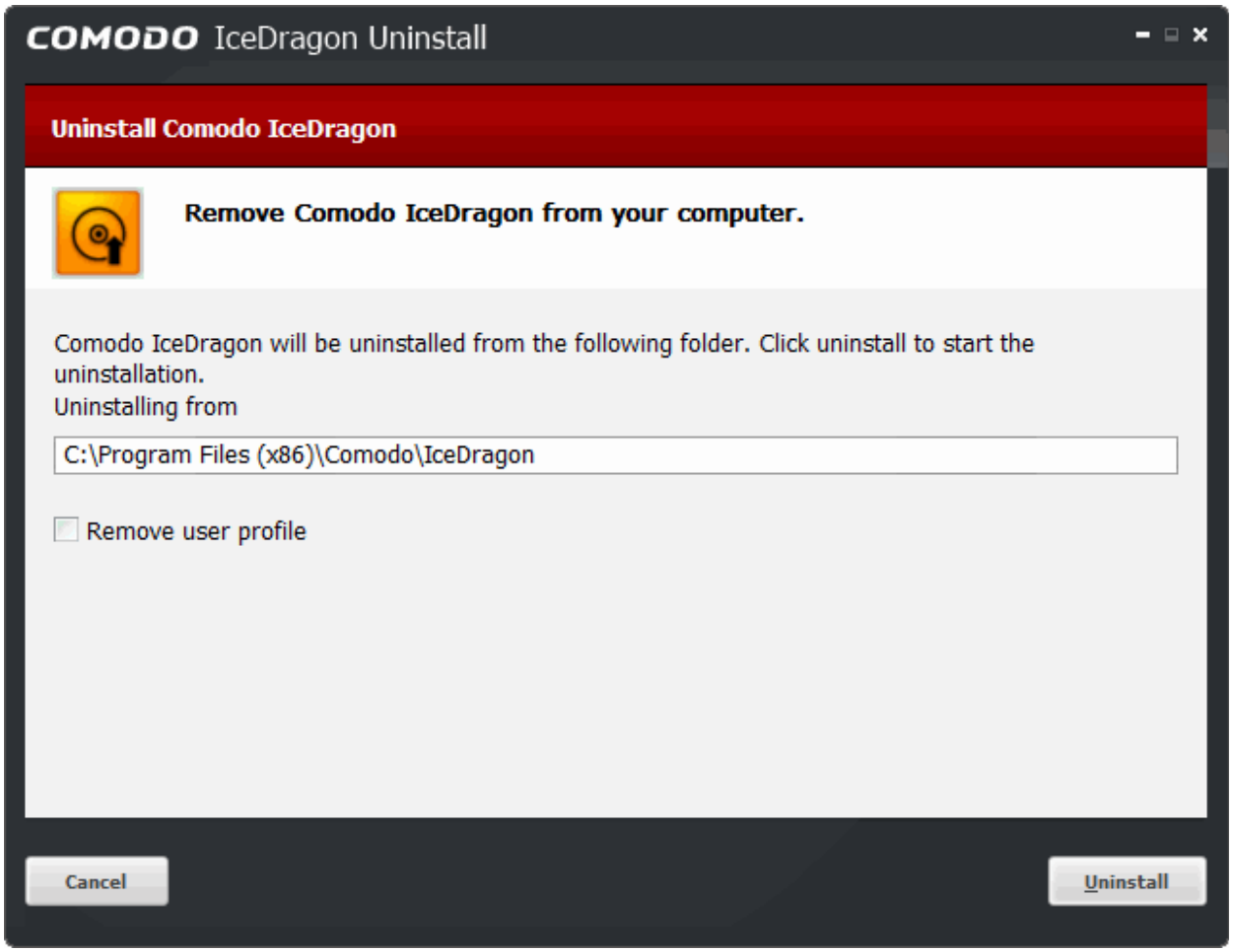
- Click 'Start' > 'Settings' > 'Control Panel'

- In the list of currently installed programs, click 'Comodo IceDragon'
- In the 'Control Panel', select 'Programs and Features', double-click 'Uninstall/Change'

  OR
- Click Start > All Programs > Comodo > IceDragon > Uninstall Comodo IceDragon.

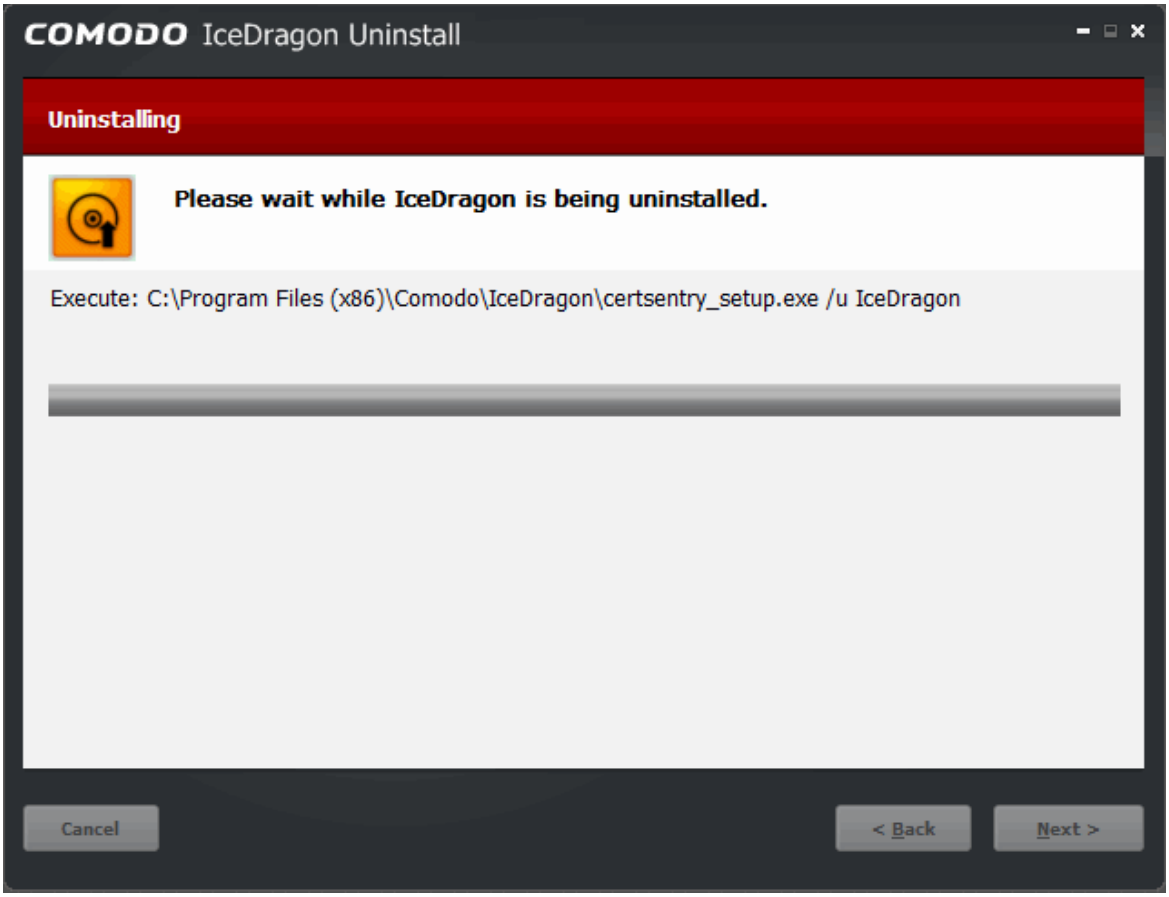


The 'Uninstall Comodo IceDragon' dialog will open:

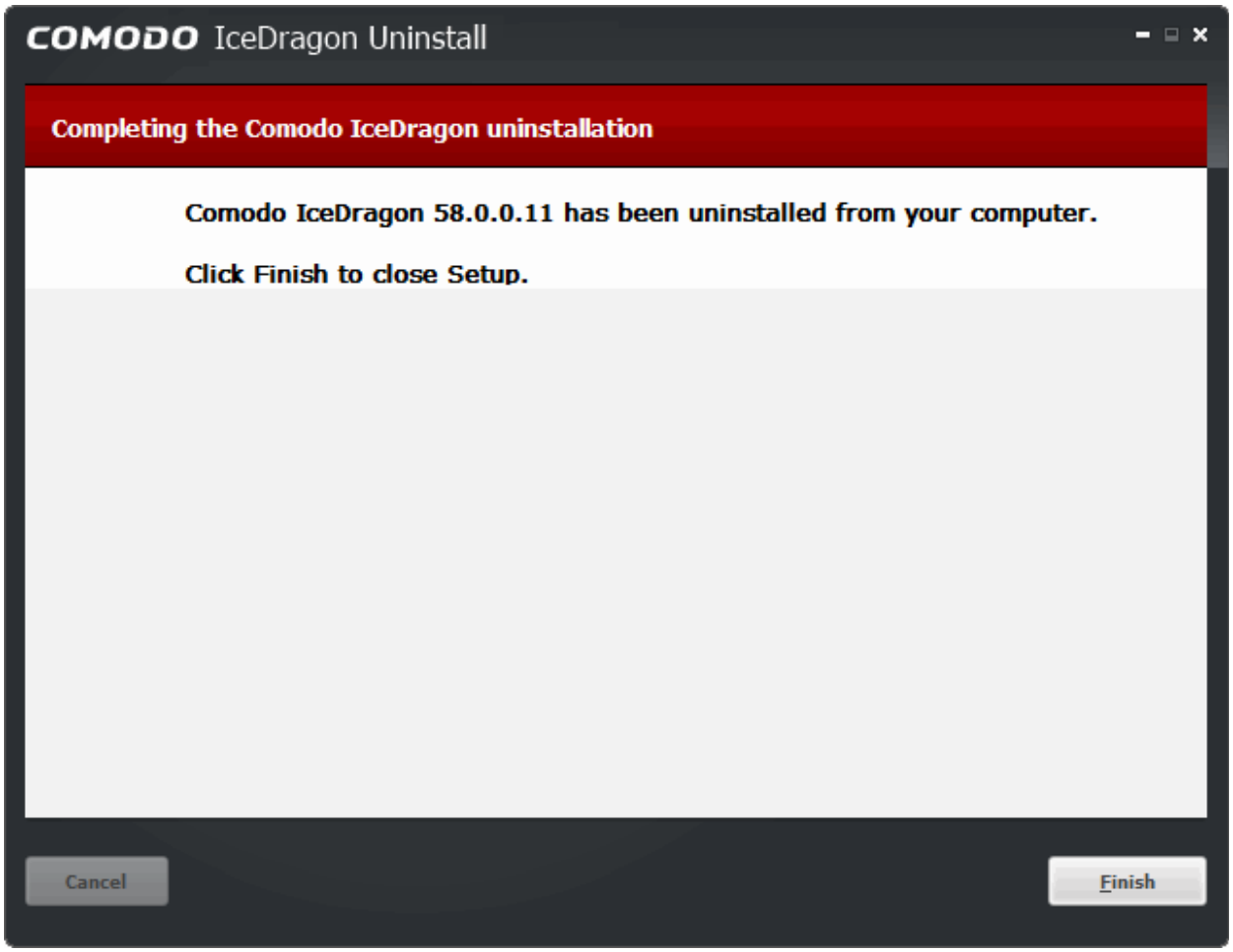


- By default, you will be provided a choice to save your IceDragon profile data in your computer.
  - If you plan to install IceDragon again at a later time, IceDragon will use this profile data to configure your new installation.
  - If you do not wish to retain or transfer your browser settings, select the checkbox 'Remove user profile'.

  The screen displays the selection of the folder in your hard drive for installing Comodo IceDragon. The default installation location is C:\Program Files (x86)\Comodo\IceDragon.
- Click 'Uninstall' button to run the uninstallation.



- On completion, click 'Finish' to close the window.



5. Tabbed Browsing

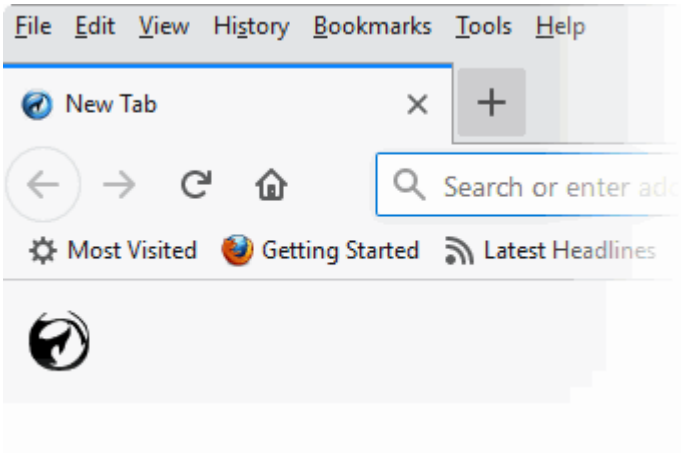
This section explains how to use tabs to view websites in Comodo IceDragon. Click the following links to find out more:

- **Use tabs**
- **Customize Your New Tab Page**
- **Tab Settings**

5.1. Use Tabs

Each time you open a web-page in Comodo IceDragon it will display what is known as a 'tab'.

- Multiple tabs can be opened at once. Each tab contains a different webpage.
- Click any tab to switch straight to that page.
- Click the 'new Tab' button to open a blank tab.
- Click the 'X' button on the right of the tab to close a tab.
- To open a new tab, click the + icon, which is next to the last tab:



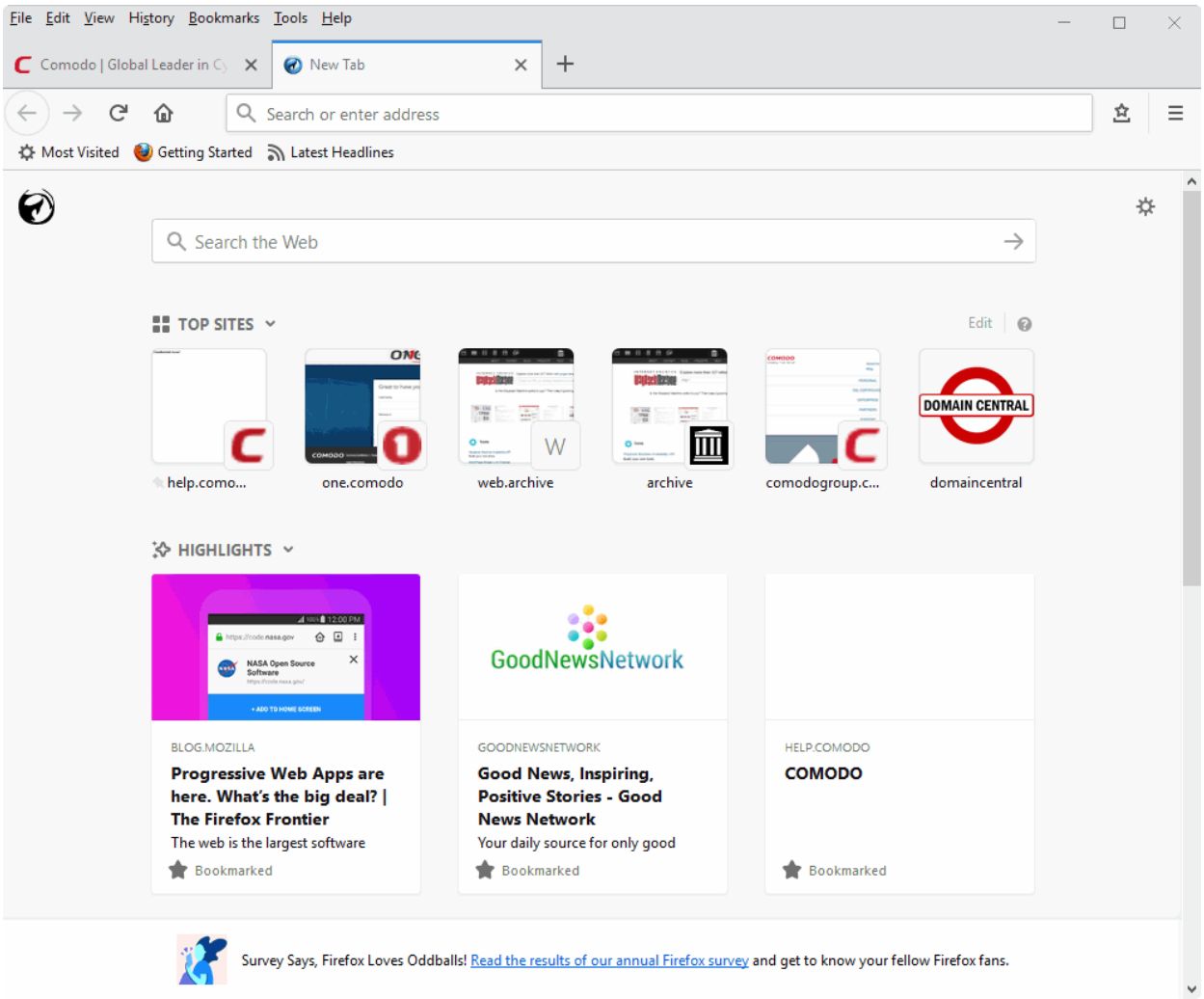
- To rearrange tabs, left-click on a tab, hold-down the mouse button then drag the tab to its new position
- When you open a new, 'blank' tab, it will display a list of your most visited websites for your easy access:

Next:

- **Customize Your 'New Tab' Page**
- **Tab Settings**

5.2. Customize Your 'New Tab' Page

- By default, when you open a new tab you will see a list of your most visited websites.
- However, you can make the 'New Tab' page display whatever pages you want.
- Each website is displayed as a tile. Tiles can be deleted and rearranged as you see fit.

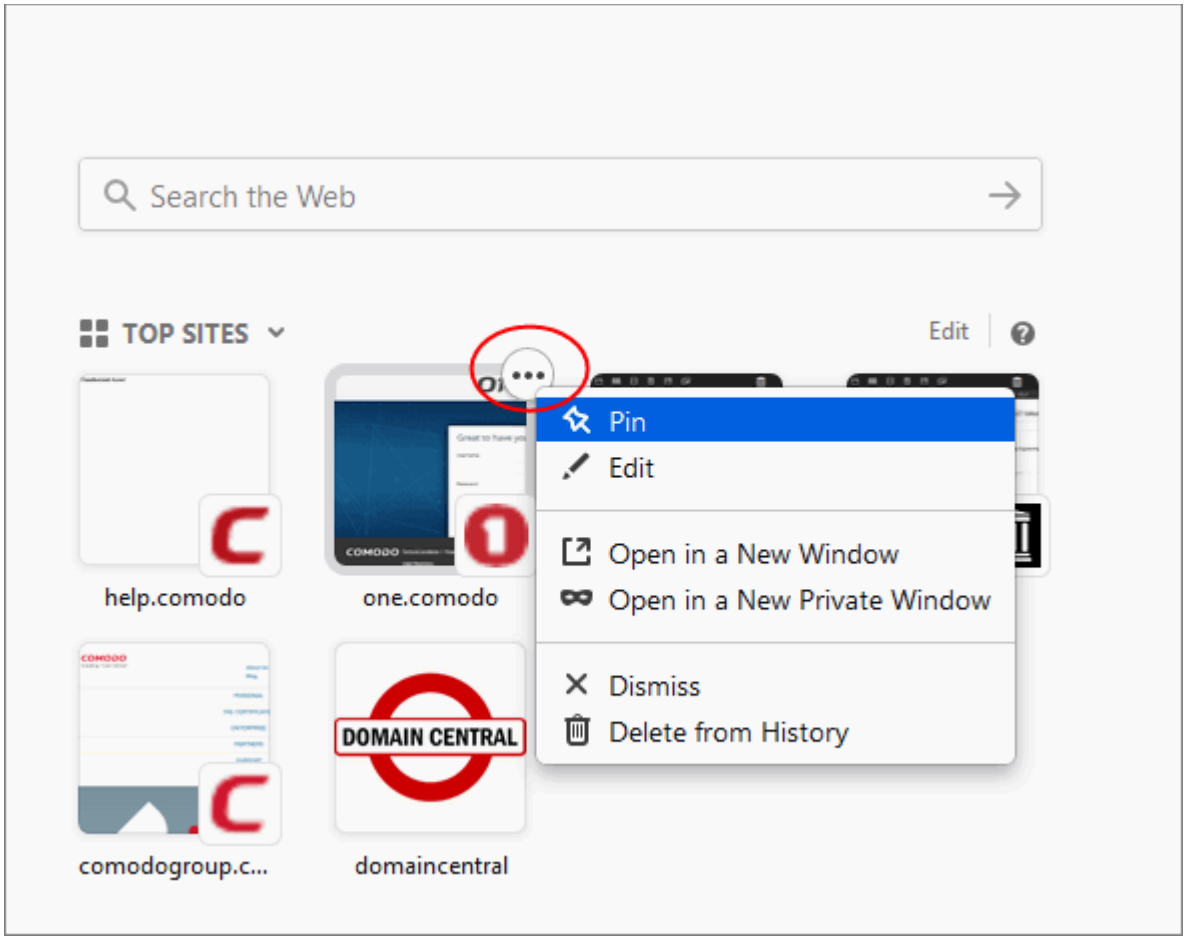


To add a site to the new tab page

- Open a new tab
- Click bookmarks icon on the Toolbar menu then select 'Show All Bookmarks' to open the 'Library' window
- Select a bookmark and drag it to the new tab page

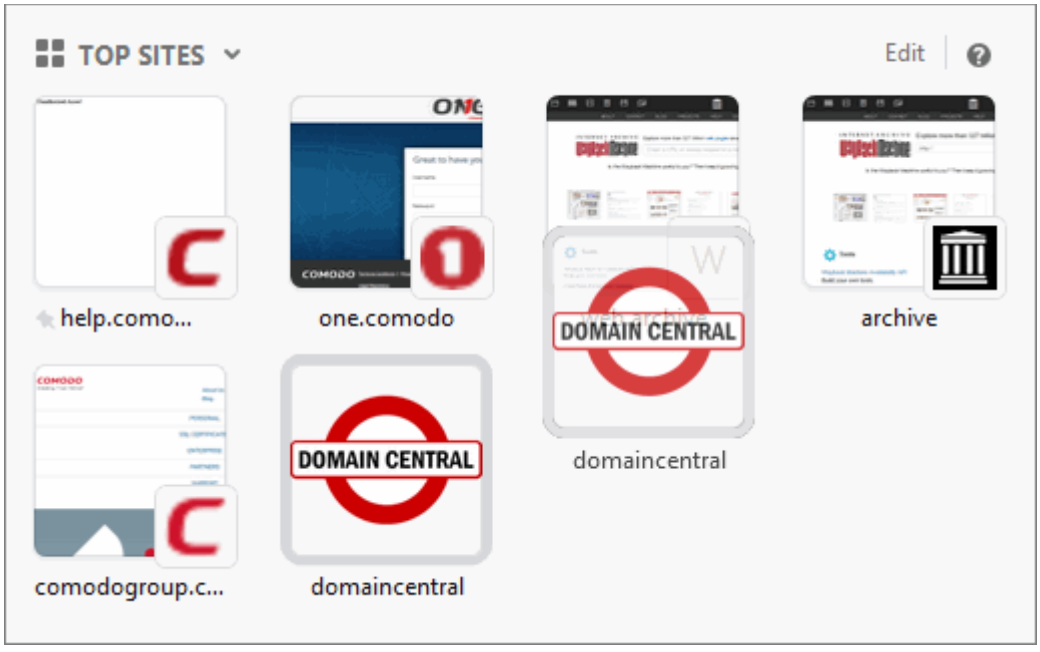
To pin /unpin top sites

- Open a new tab
- Place your mouse over a tile
- A ••• will appear in the top-right corner of the tile
- Click the icon then select 'Pin' to lock or unlock the page



To rearrange top sites

- Simply click and drag the tile into the position you prefer.



To open a tile in a new window

- Hover the mouse cursor on a tile
- Click the three-dot icon at top-right

- Select 'Open in a New Window'

To open a tile in a new private window

- Hover the mouse cursor on a tile
- Click the three-dot icon at top-right
- Select "Open in a New Private Window' to avoid saving in your browsing history.

To remove a tile

- Hover the mouse cursor on it
- Click the three-dot icon at the top-right corner
- Click 'Dismiss'

To delete a tile from history

- Hover the mouse cursor on a tile
- Click the three-dot icon at top-right
- Select "Delete from History' to remove a site from your browsing history.

To customize your top sites section

There are the following options available: 'Edit' and 'New tab Preferences'.

- Hover your cursor over the tile and click 'Edit'
  - Click 'Add' button and type a name for the site and a URL to pin a specific site to top sites
  - Click 'Add' to save your settings.
  - Click 'Show More' / 'Show Fewer' button to add /remove a row of top sites
- Click 'Done' for the settings to take effect.

Customize New Tab Preferences

This lets you configure sites to be viewed on a new tab.

- Hover your cursor over the tile and click the icon

  OR
- Click the cog icon at the upper-right
- Check 'Search box to display the search text box in the new tab
- Check 'Top Sites' to access the most visited sites
  - Select 'Show two rows' to view more rows of top sites
- Select 'Highlights' to enable sites you have recently visited or bookmarked. You will see: Top sites, media, an animated GIF.
  - You can: Bookmarks, Save to pocket to manage articles, (save, remove or open article in a new tab).
- Select 'Snippets' to view the 'Progressive Web Apps'
- Click 'Done' for the settings to take effect.

To reset the page to show blank thumbnails, clear the browsing history. To do this,

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Library' > 'History' > 'Clear Recent History' > select 'Clear Now' button.

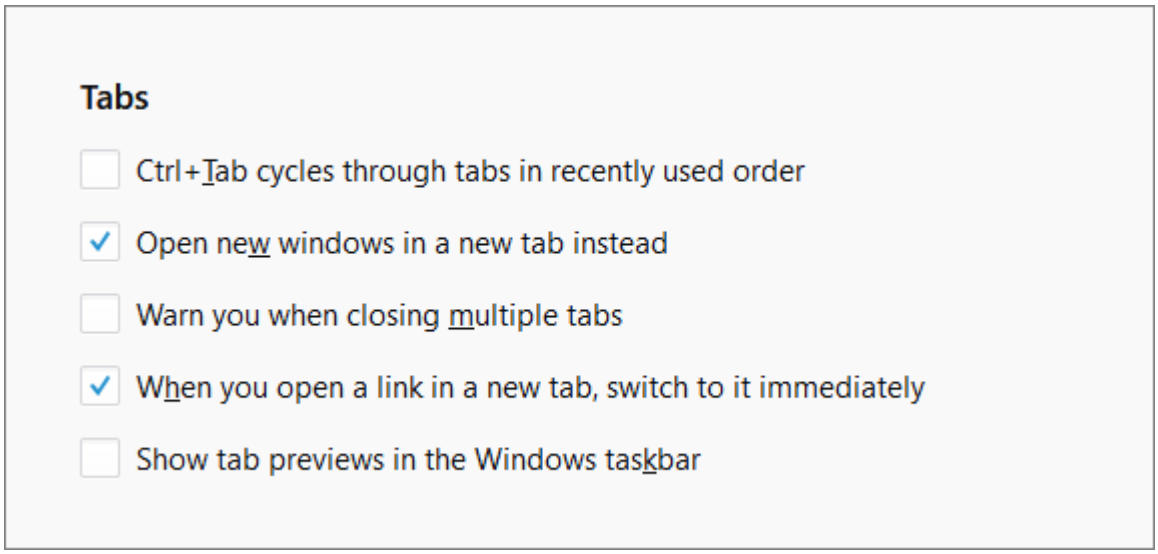
5.3. Tab Settings

The following sections explain more about:

- **Configure tab settings**
- **Restore previous session from the homepage**
- **Restore the previous session from the main menu**
- **Re-open tabs from your last session when you next start IceDragon**
- **Use right-click options**

To configure tab settings

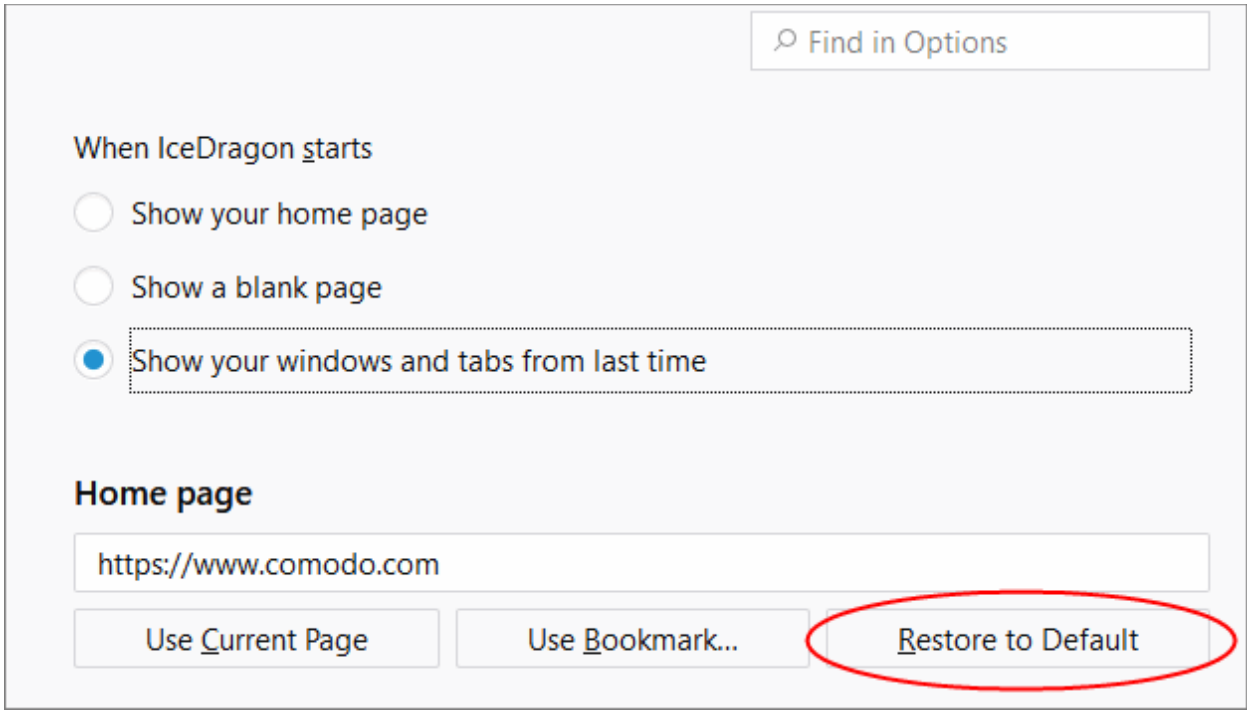
- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Options' > 'General' button:



- **CTRL+Tab cycles through tabs in recently used order** – Lets you use Ctrl+Tab to view open tabs one at a time.
- **Open new windows in a new tab instead** - This option allows you to determine whether links from other applications or from web pages are opened in a new window or a new tab in the most recent window.
- **Warn you when closing multiple tabs** – You will get an alert when trying to close multiple tabs. This is useful if accidentally try to close the browser while background tasks are in-progress.
- **When you open a link in a new tab, switch to it immediately** - Check this option to load and display the page in a new foreground tab.
- **Show tab previews in the Windows taskbar** - Check this option to show a separate preview for each tab.

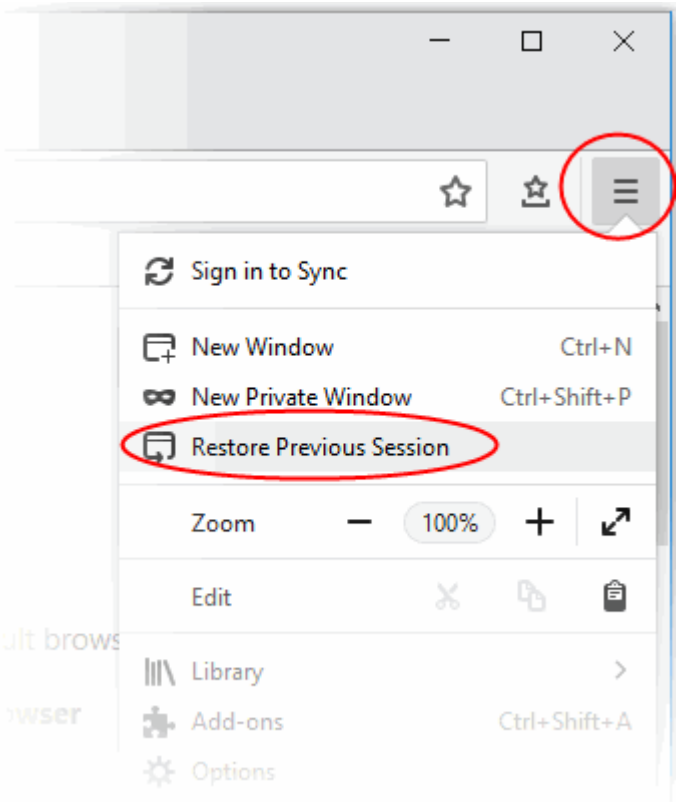
To restore a tab or a window from the homepage menu

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Options' > 'General'
- In the 'Home page' area, click 'Restore to Default'



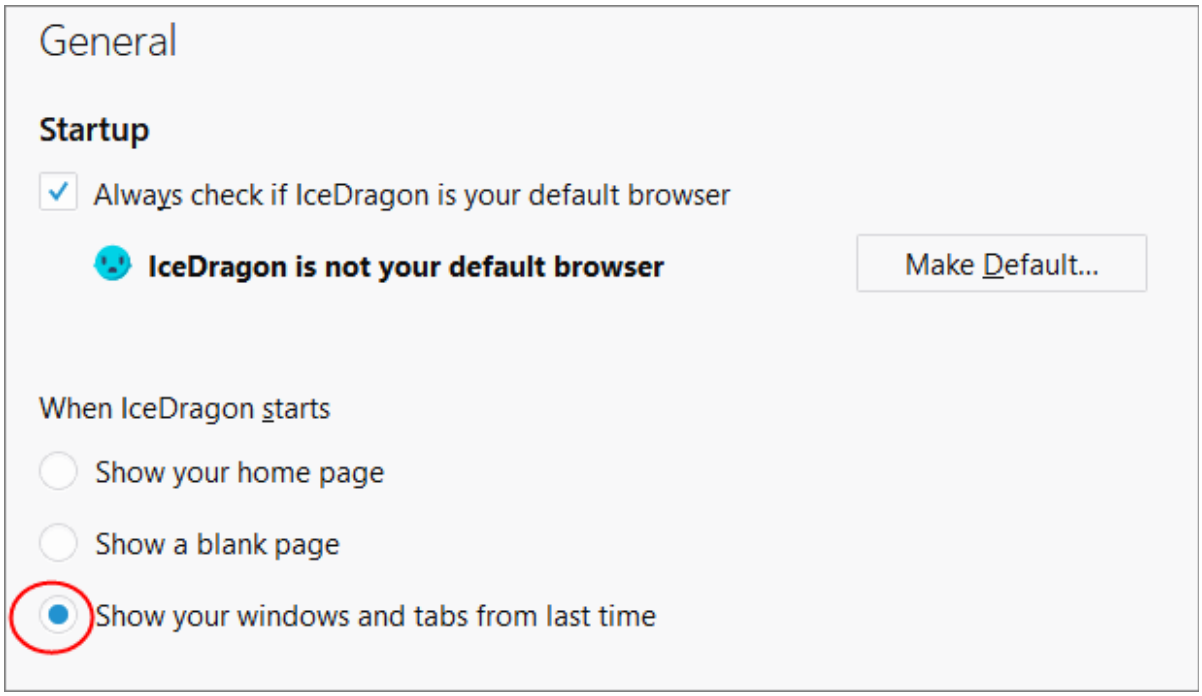
To restore from the main menu

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Restore Previous Session'



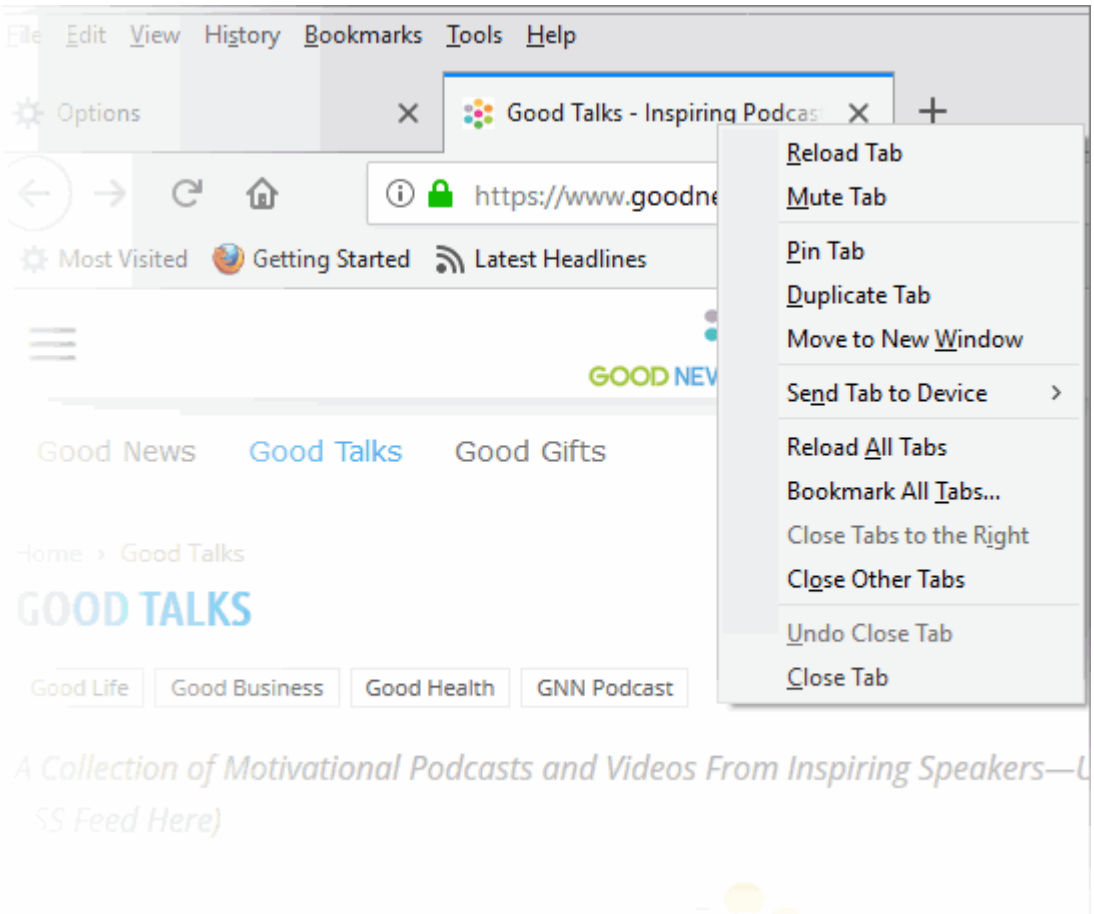
To re-open the tabs from your last session when you next start IceDragon

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > 'General' tab
- Under 'Startup' select 'Show your windows and tabs from last time' from the 'When IceDragon starts'



Right-click options

- Right-click on any tab to open a context-sensitive menu:



- **Reload Tab** – Refreshes the page
- **Mute Tab –** Turns off the sound of a particular tab
- **Pin Tab** – Pins the tab to left of the browser window
- **Duplicate Tab** - Copy a URL in current tab and open it in a new tab
- **Move to New Window** - Opens a tab in a new window
- **Send Tab to Device** – Send tab from your desktop to your mobile devices:
  - Sign in to Sync – To use a setting on any computer that has IceDragon installed.
- **Reload All Tabs** – Reopens last closed tab in the same tab location of the browser window
- **Bookmark All Tabs** – All tabs that are currently open in the browser will be bookmarked
- **Close Tabs to the Right** - Closes tabs to the right
- **Close Other Tabs** – Closes all other tabs
- **Undo Close Tabs** - Undoes closed tabs through a toolbar button or the right-click context menu
- **Close Tab** - Closes the tab

Further reading related to the topic of this page:

- **Use Tabs**
- **Customize Your 'New Tab' Page**

6. Bookmarks

Bookmarks are an easy way to save links to your favorite web-pages so you can quickly visit them later. This section shows you how to create, edit and manage bookmarks. Click the following links to find out more.

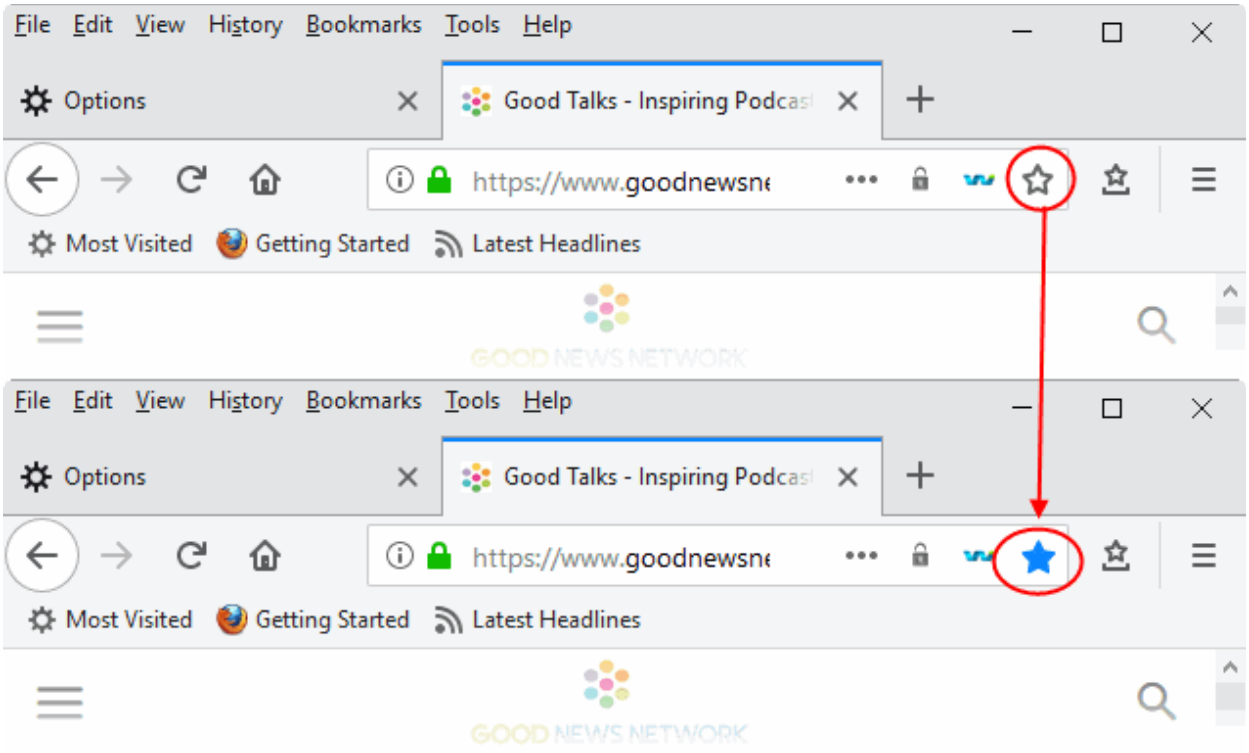
- **Create Bookmarks**
- **Find and Edit Bookmarks**
- **Manage Bookmarks**
- **Import and Export Bookmarks**

6.1. Create Bookmarks

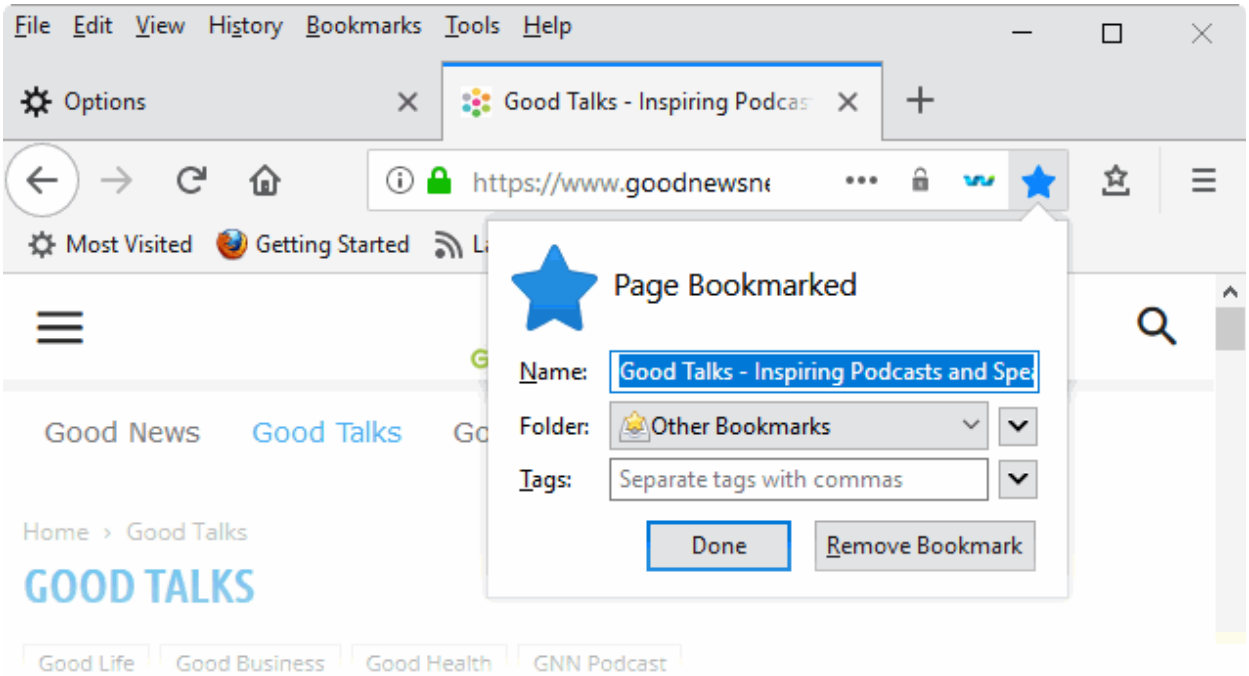
There are multiple ways to create a bookmark:

Method 1

When on a webpage that you want to bookmark, simply click the star at the right of the address bar:



- Once bookmarked, the star will change color to blue.
- On all subsequent visits to bookmarked pages, you will see this blue star.
- By default, a bookmark will be created in the 'Other Bookmarks' folder.
- Click the star to open option menu which allows you to modify bookmarks:



You can remove the bookmark or change the folder in which the bookmark is saved.

Method 2

- In the 'Bookmarks' menu bar, select 'Bookmark This Page'

Method 3

To bookmark all open tabs at once,

- Right-click on any tab and select 'Bookmark All Tabs...' on the context sensitive menu
- Next, assign a name for the set of bookmarks and specify the folder in which they should be saved
- Click 'Add Bookmarks' to save your bookmarks.

Method 4

You can **import bookmarks** from other browsers.

Method 5

Drag and drop a link or URL onto the 'bookmarks' button on the right of the address bar.

Method 6

Use the keyboard short cut CTRL+D to bookmark the page you are currently viewing.

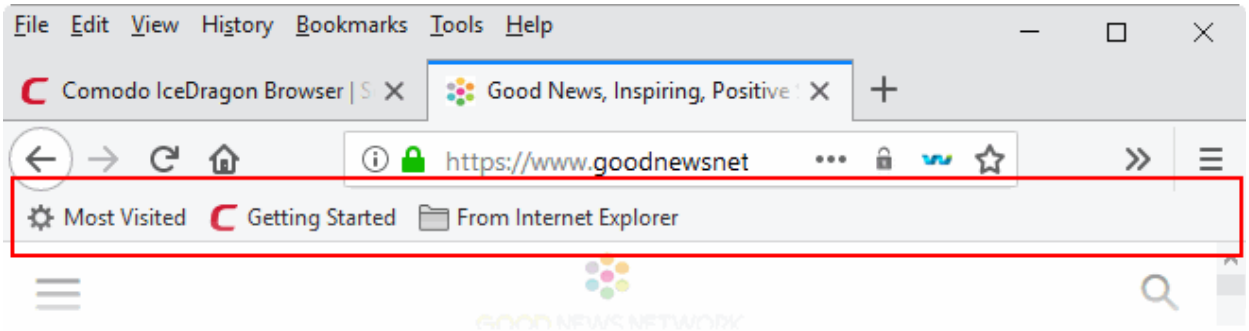
The following links contain further reading on bookmarks:

- **Find and Edit Bookmarks**
- **Manage Bookmarks**
- **Import and Export Bookmarks**

6.2. Find and Edit Bookmarks

The bookmark bar under the address bar displays all your bookmarked pages and folders.

If you have not docked the bookmark bar, follow the steps given below:



- **Dock the bookmark bar**
- **Add bookmarks to the bookmarks toolbar**
- **Relocate bookmarks on the bookmarks toolbar**
- **Right-click options**
- **Edit bookmarks**
- **Delete bookmarks**

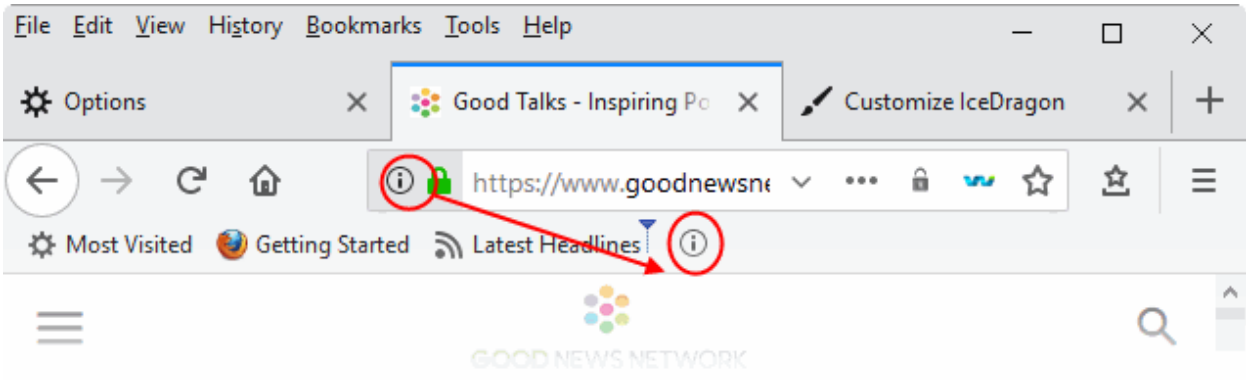
To dock the bookmark bar

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Customize'
- This will open the 'Additional Tools and Features' page
- Click the 'Toolbars' drop-down at the bottom and enable 'Bookmarks Toolbar'

- Click the 'Done' button or close the tab
- The new toolbar will immediately appear below the address bar

Add bookmarks to the bookmarks toolbar

- Open the web page to be added to the bookmarks toolbar
- Click and simply drag the web site icon on to the bookmarks toolbar in the 'Location' bar



Relocate bookmarks on the bookmarks toolbar

- Click the bookmark or folder and drag it into new position.

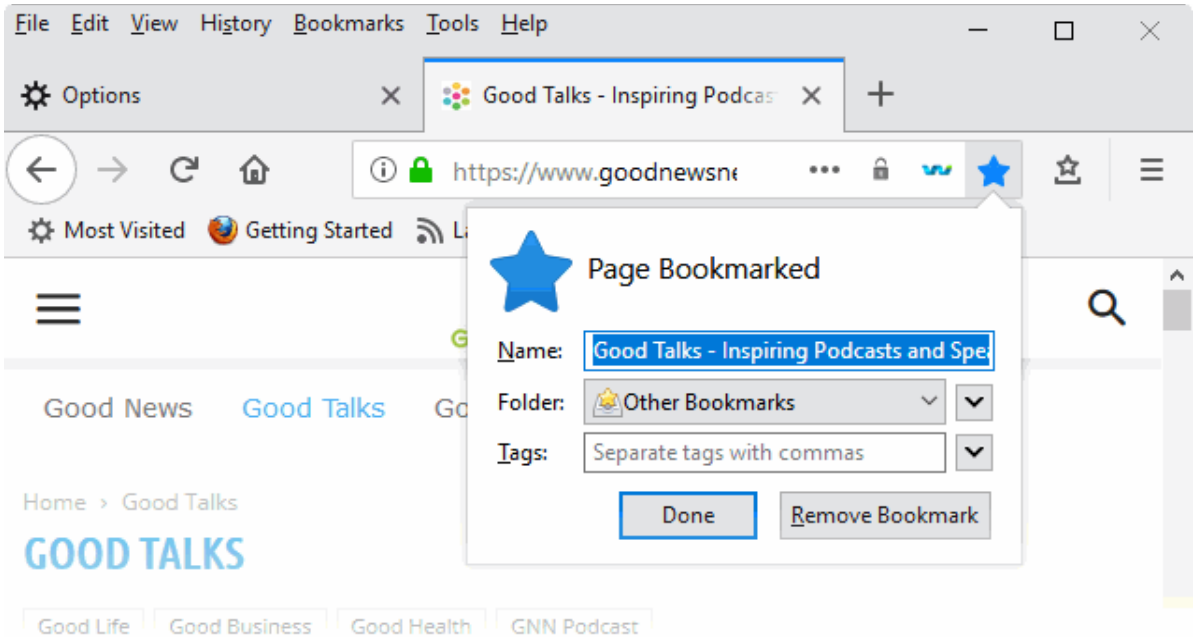
Right-click options on the bookmark bar

The following options are available when you right-click on the bookmark bar:

- Open All in Tabs
- New Bookmark
- New Folder
- New Separator
- Paste

To edit bookmarks

- Click the blue star on the address bar



- Name – Bookmarks label.
- Folder – Default folders to store your bookmark (Bookmarks Toolbar, Bookmarks Menu, Other Bookmarks). Click the arrow beside the drop-down to specify a different folder or create a new folder.
- Tags - Set tags for the bookmark. Tags can be searched from the IceDragon address bar.
- Click the arrow button to expand the 'Folder' / 'Tags' or to create a new folder.

To delete bookmarks

- Open the page in your bookmarks
- Click the star icon and click 'Remove Bookmark' button

Please note: When you delete a folder, all the bookmarks in the folder will also be deleted.

To set the toolbar icon

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Customize'
- Drag the bookmarks tool to the bookmarks tool bar
- Click the 'Done' button to appear in the bookmarks tool bar.

To show/hide the bookmarks toolbar

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Customize'
- Uncheck the 'Bookmarks Toolbar' in the 'Toolbars' drop-down.

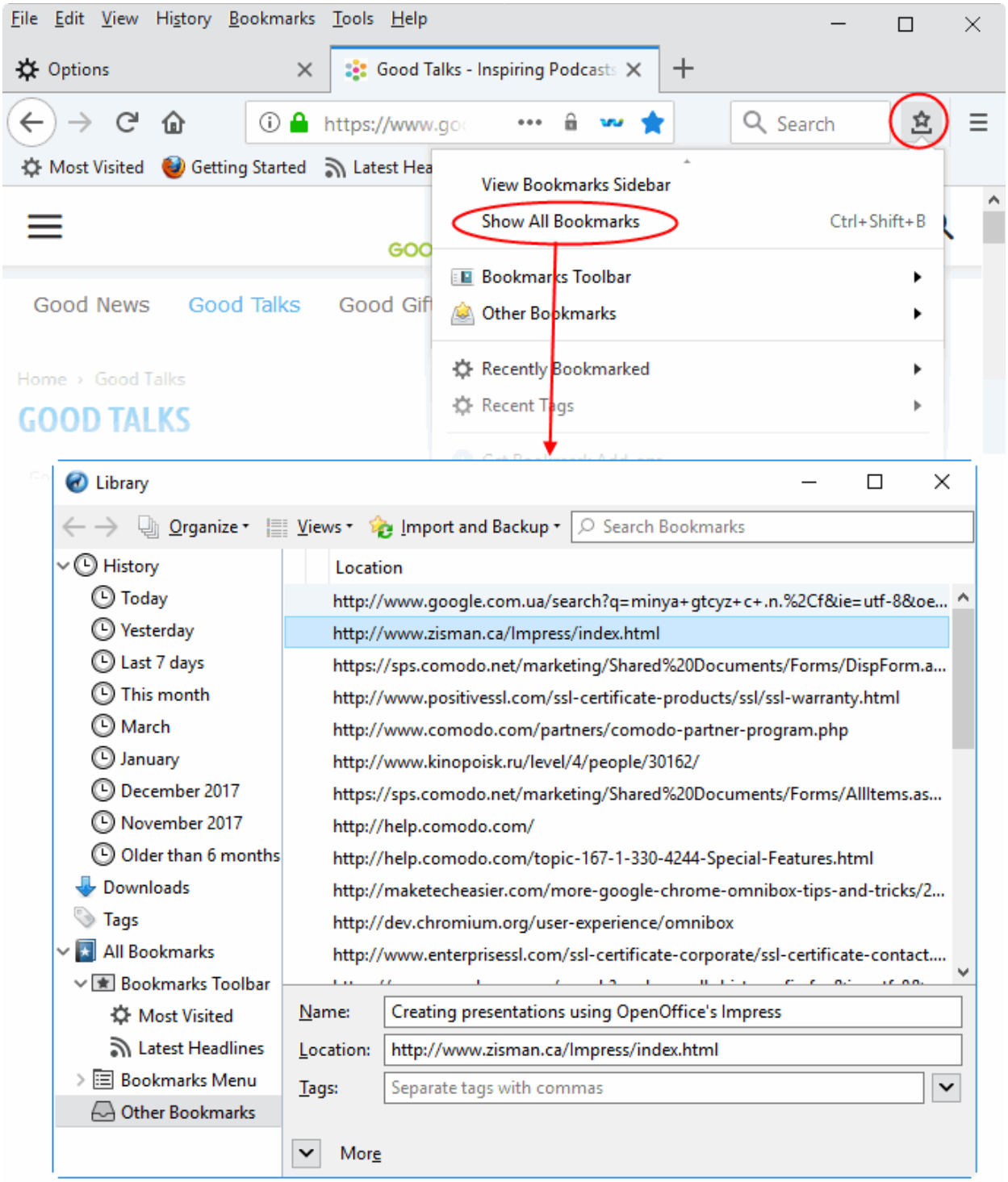
6.3. Manage Bookmarks

Comodo IceDragon allows you to organize your bookmarks. From here you can edit, delete or rename bookmarks and folders.

To organize your bookmarks

- Click the 'Show your bookmarks' icon next to the address bar
- Select 'Show All Bookmarks'

The 'Library' interface will be displayed.



From here you can:

- **Search bookmarks**
- **View / sort bookmarks**
- **Rename / edit bookmarks**
- **Delete a one bookmark**
- **Delete multiple bookmarks**
- **Move a bookmark**

To search bookmarks

- Enter the bookmark name in the search box in the 'Library' interface

  Or

- Enter the bookmark name in the search box from the Side bar.

To view / sort bookmarks

- Click the Bookmark button and select 'Show All Bookmarks'
- Click the 'Views' button to open menus which allow you to sort bookmarks by various criteria, and to add additional columns to the bookmarks table.
- Alternatively, right-click on the 'Bookmarks Toolbar' folder and select 'Sort By Name'

To rename a folder, bookmark or edit its address

- Select the bookmark you want to edit
- Click the star icon and change the name of the bookmark in the 'Edit This Bookmark' dialog

  OR

- Click the 'Show your bookmarks' icon next to the address bar. Select a bookmark from the list and edit its name or URL using the fields at the bottom of the interface

To add a new bookmark folder

- Select the location you want to add new bookmark folder in the left side
- Click the 'Organize' menu and select 'New Folder'
- You can also right-click on the desired location and add a new folder from the menu.

To delete bookmarks or folders

- Click on the star icon in the 'Location' bar
- Click the 'Remove Bookmark' button

  OR

- Click the 'Show your bookmarks' icon on the right of the address bar
- Select 'Show All Bookmarks' to open the 'Library' window
- In the left pane, click on the folder you want to view (its content appears in the right pane.)
- CTRL+click to select multiple items
- Right click on the selected items and select 'Delete' (or click 'Organize' > 'Delete')

To move bookmarks

Just click and drag a bookmark or folder to another destination to the folder list in the left side.

6.4. Bookmarks - Import, Export and Back up

You can import bookmarks from other browsers, to export bookmarks to HTML and automatically create backups of your bookmarks on a daily basis (allowing you to restore them at any point).

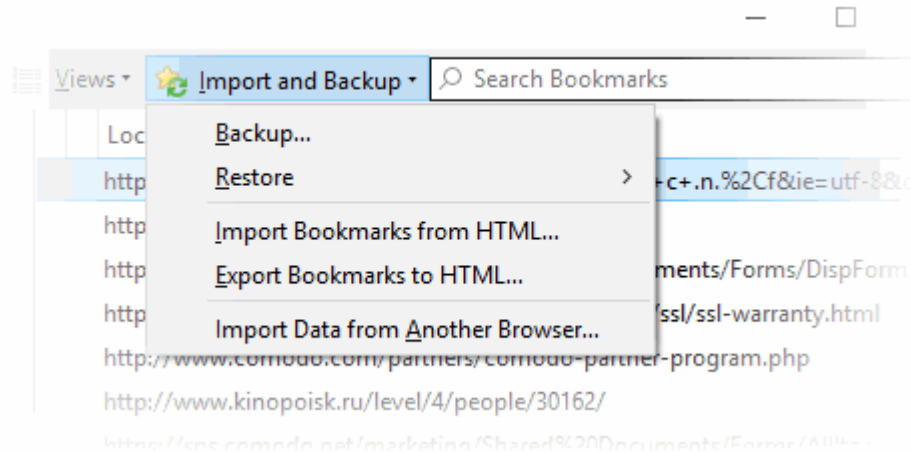
Click the following links for more help:

- **Import bookmarks**
- **Import bookmarks from any browser as a HTML file**

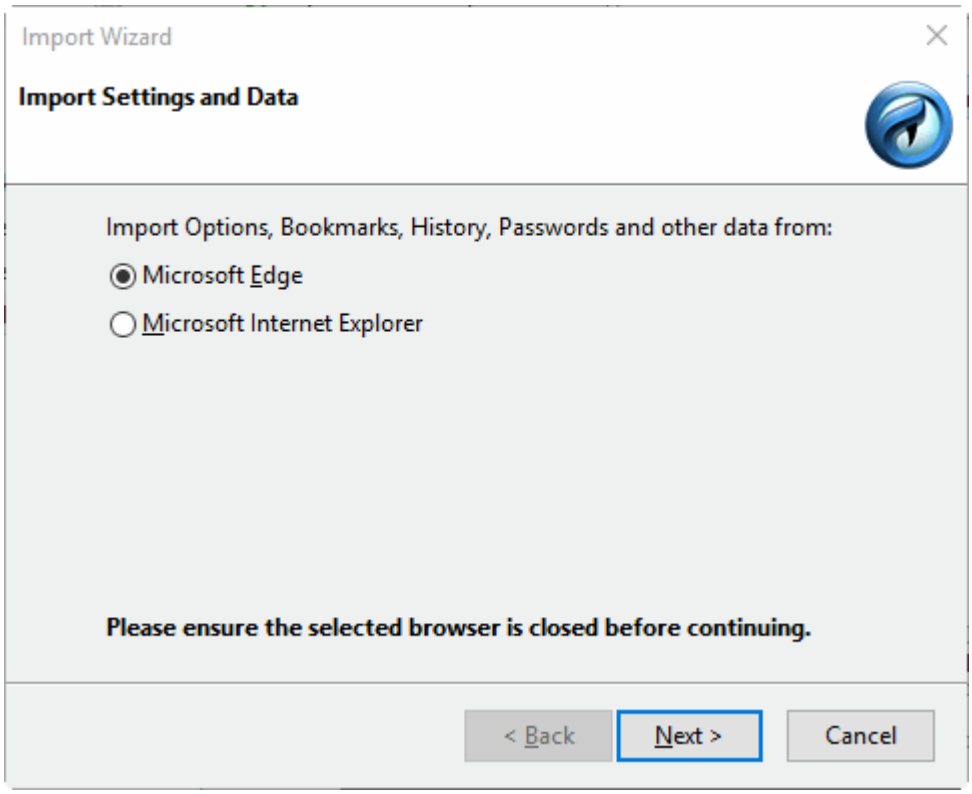
- **Export bookmarks**
- **Restore from backup**

To import bookmarks from Microsoft Edge and Internet Explorer

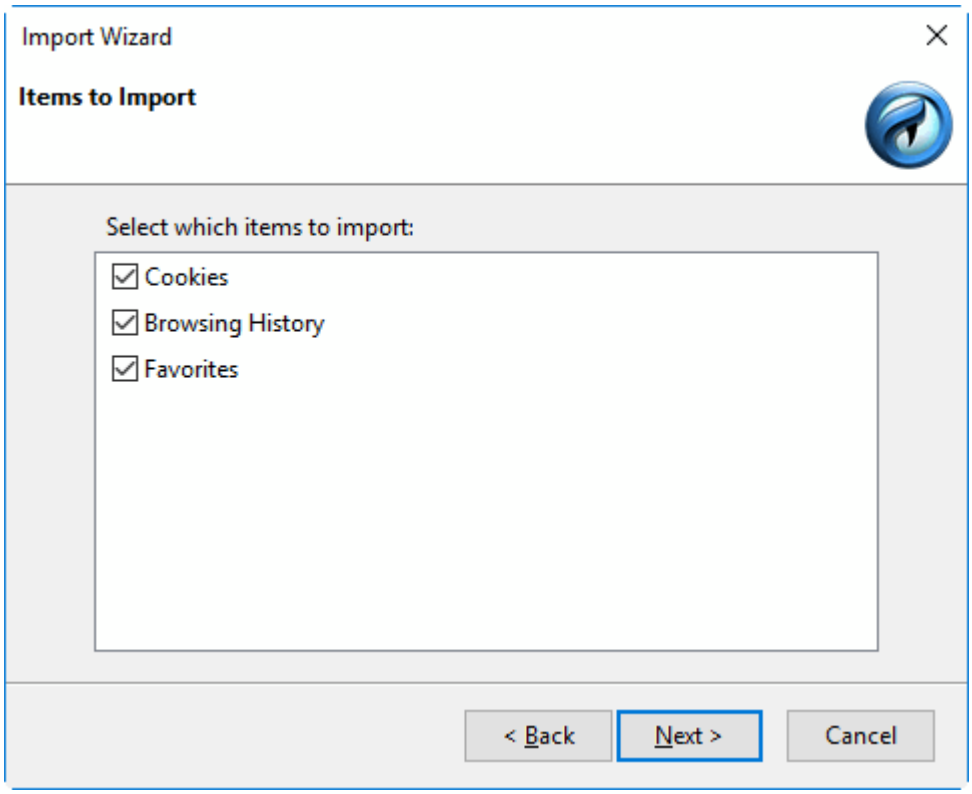
- Click the 'Show your bookmarks' button
- Select 'Show All Bookmarks'
- Click the 'Import and Backup'



- Select 'Import Data from Another Browser'.

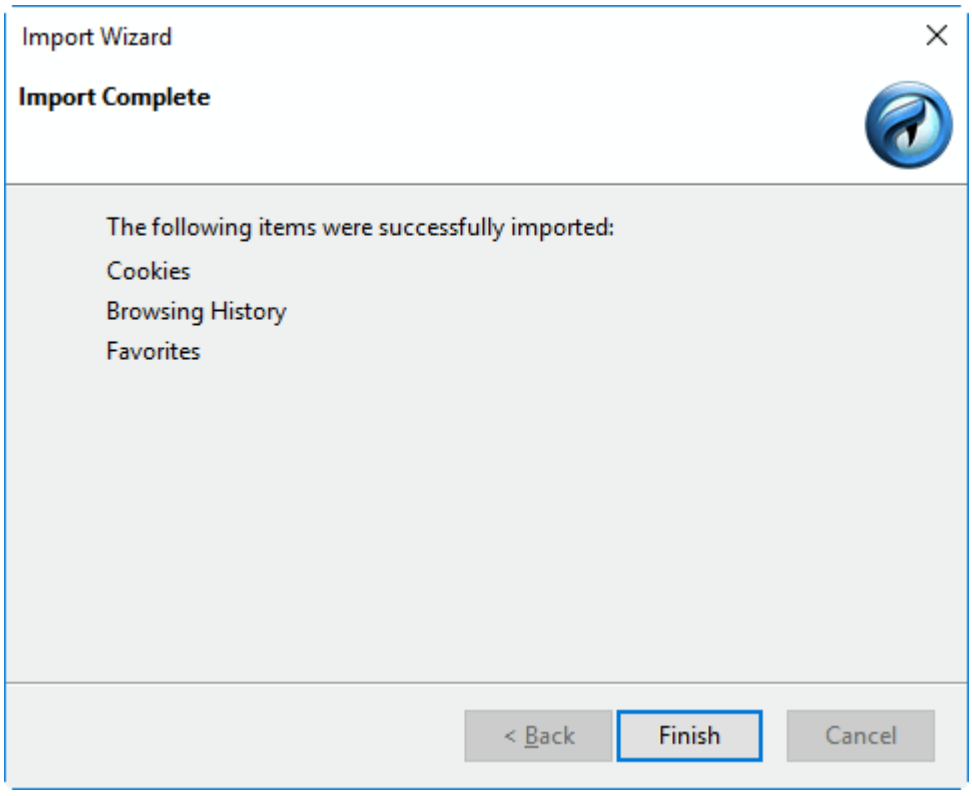


- Select the browser from which you want to import then the specific items you wish to import:



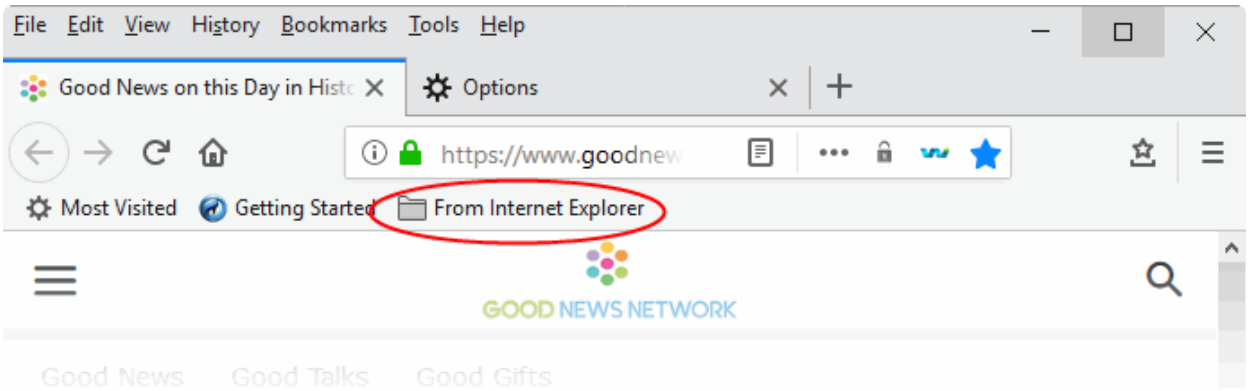
- **Cookies:** Small files stored on your computer by websites you have visited that contain information about your preferences while on that website. Cookies are used for such things as keeping you logged in to a website and to save your site preferences
- **Browsing History**: A list of URLs that you have recently visited
- **Favorites:** (also known as 'Bookmarks'). Imports your bookmarks from the source browser

- Click the 'Next' button then click 'Finish' at the confirmation dialog:



Bookmarks from the other browsers will now be available in Comodo IceDragon in a folder named 'From Internet Explorer' or 'Microsoft Edge'.

- To view and access your bookmarks, simply click the bookmarks button.
- All Bookmarks (including any imported) will be listed in the menu:



To import bookmarks from any browser as a HTML file

- Click the 'Show your bookmarks' button then 'Show All Bookmarks'
- Click the 'Import and Backup' tab on the 'Library'
- Click 'Import Import Bookmarks from HTML'
- Navigate to the HTML file saved in your computer and click 'Open'.

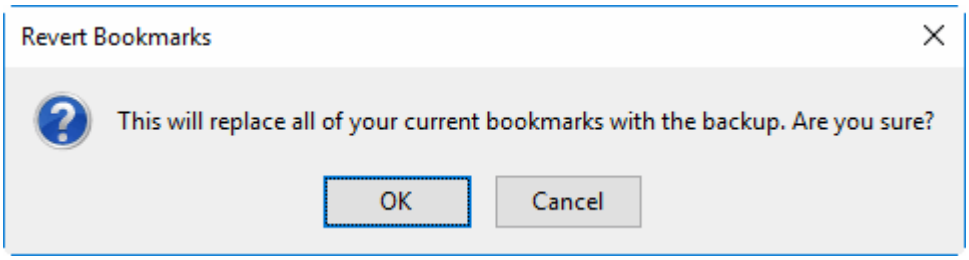
To export bookmarks

- Click the 'Show your bookmarks' button then 'Show All Bookmarks'
- Click the 'Import and Backup' tab on the 'Library'
- Select the 'Export Bookmarks to HTML'
- Choose a location where you want the bookmarks to be saved and click the 'Save' button

To restore from backup

- Click the 'Show your bookmarks' button then 'Show All Bookmarks'
- Click the 'Import and Backup' tab on the 'Library'
- Click 'Restore'. Select the backup from which you want to restore
  - The dated entries are automatic backups.
  - 'Choose File...' lets you restore from a manual backup.

The 'Revert Bookmarks' dialog will appear, click 'OK'.



After choosing a backup, your bookmarks will be restored.

7. Privacy And Security

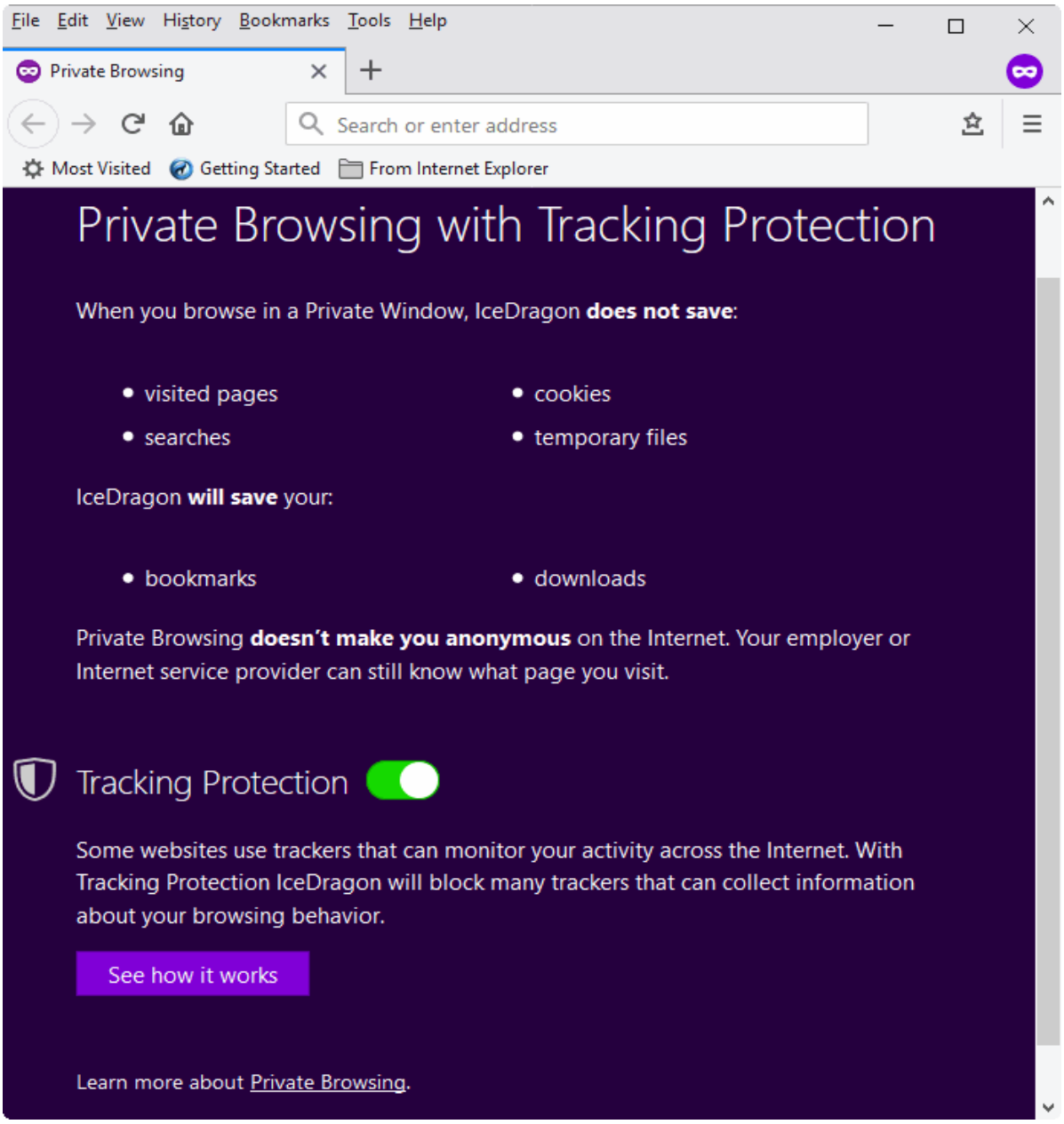
This section explains how to configure privacy and security settings in Comodo IceDragon as per your browsing requirements. By default, IceDragon is designed to ensure your private data remains safe and secure while browsing online.

Click the links to find out more:

- **Private Browsing**
- **Delete browsing history and configure history settings**
- **Allow/block pop-up windows**
- **Manage cookies**
- **Block websites from tracking your browsing history**
- **View and manage permission settings**
- **Configure suggestions when entering a website address**
- **Manage Cache**
- **Manage Add-on Permissions**
- **Manage passwords**
- **SSL Certificates and Secure Connections**
- **SSL/HTTPS security settings**
- **Force Secure Connections**
- **Website Security Indicators**
- **Disable accessibility indicator setting**
- **Configure IceDragon performance and browsing settings**
- **Network Proxy settings**

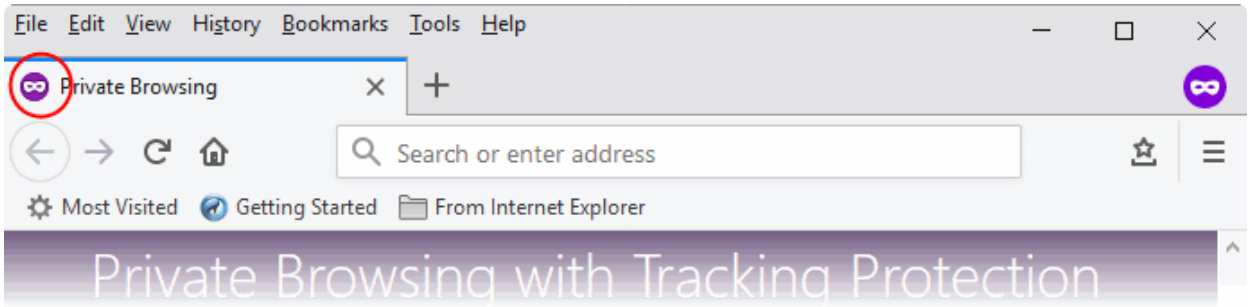
7.1. Private Browsing

In a private browsing session, IceDragon will not keep any browser history, search history, download history, web form entries, cookies, passwords or temporary internet files. This helps improve your overall security by removing any local copies of internet activity. However, any files you download and bookmarks you make will be kept.



To start a Private Browsing session

- Click the hamburger / 'Open Menu' button on the right and select 'New Private Window'
- Start browsing as normal by opening a bookmark or searching from the address bar
- A mask icon is shown at top-right while in 'Private Browsing' mode:

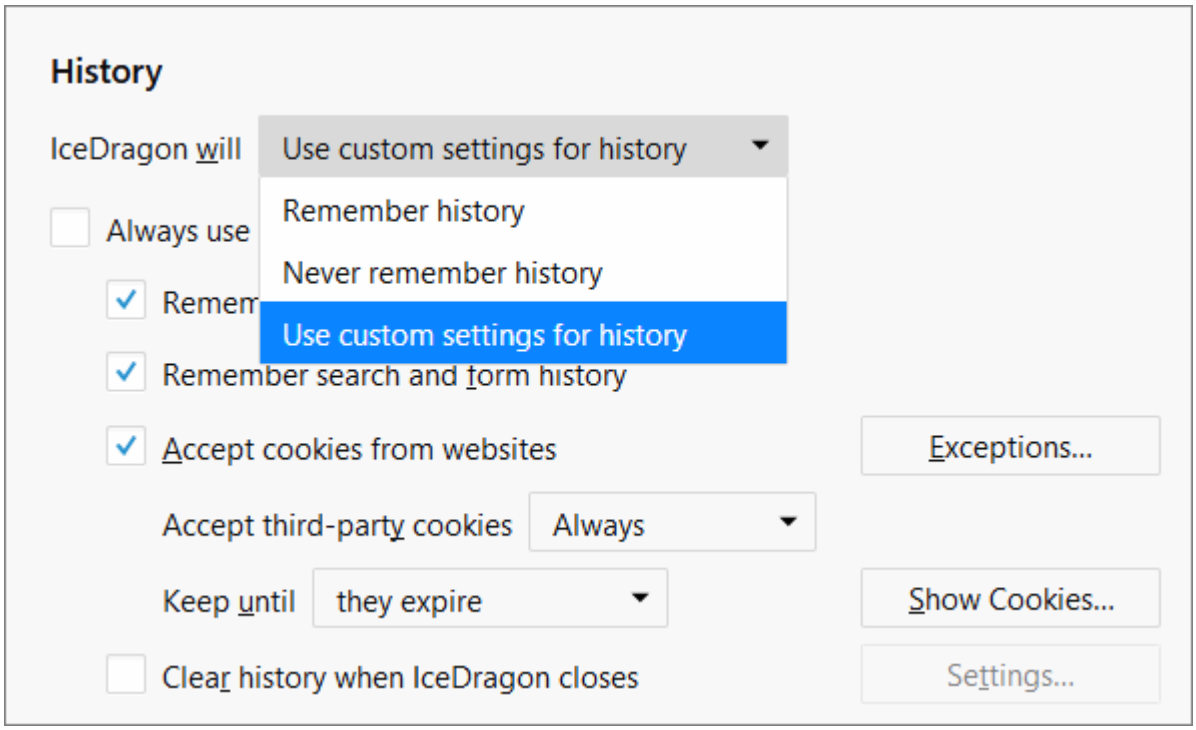


- **Tracking Protection** – Turn tracking protection on to block website elements that could track your browsing activity. See **Block Websites From Tracking Your Browsing Activities** for more detailed information.

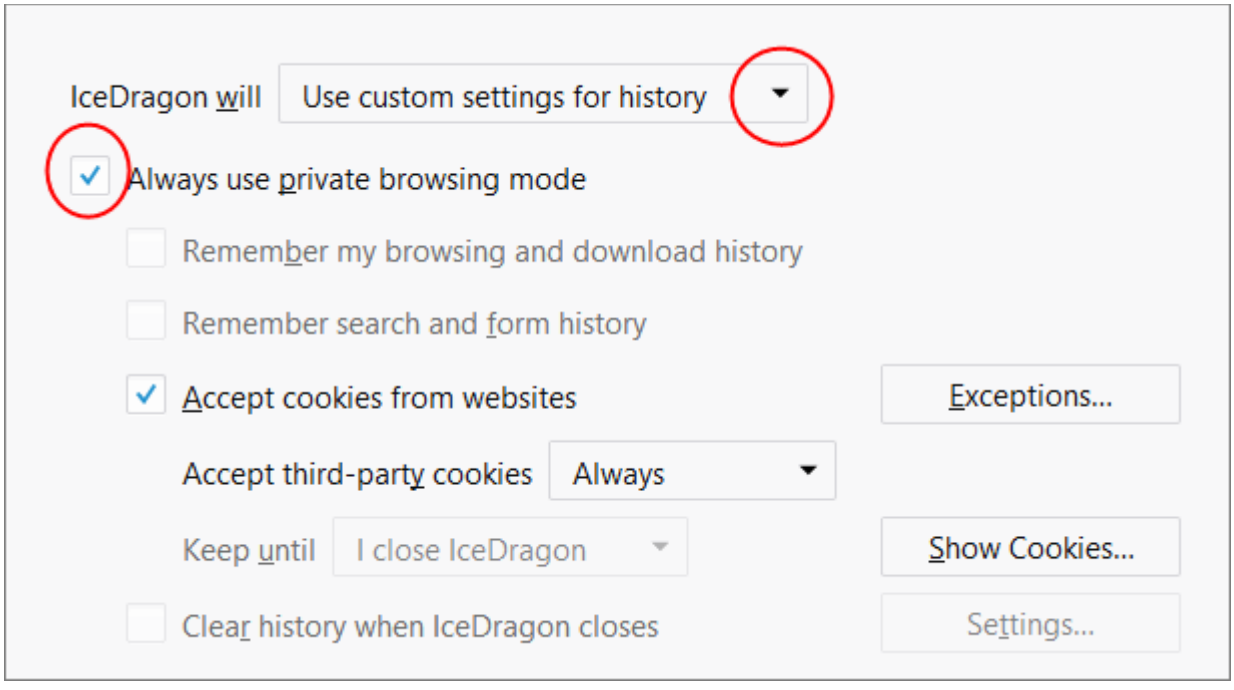
Enable Private Browsing Permanently

If you want all your browsing sessions to be kept private, you can enable private browsing permanently.

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Options' > 'Privacy & Security' tab
- Click the 'IceDragon will' drop-down > select 'Use custom settings for history'



- Enable 'Always use private browsing mode'.



- Restart IceDragon at the prompt to enable the feature.

7.2. Delete Browsing History and Configure History Settings

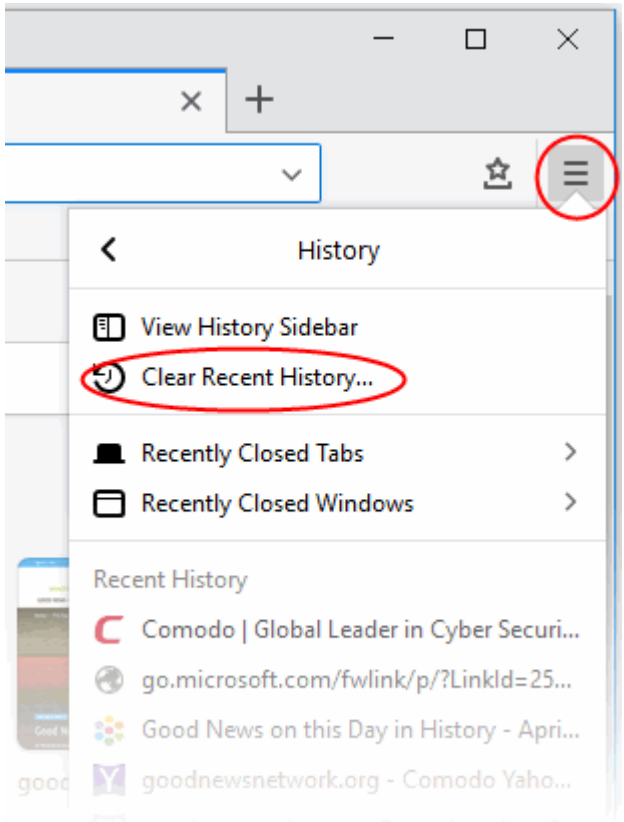
Comodo IceDragon speeds up access to websites that you visit regularly by caching the sites you visit, files you have downloaded, temporary internet files and site preferences.

This page explains how to clear browsing history and configure history settings.

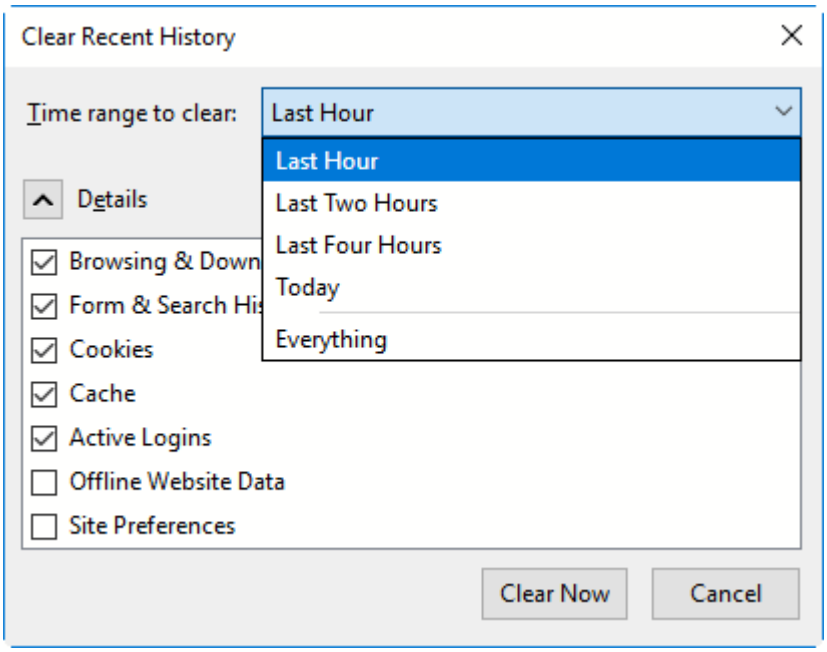
- **Delete Browsing History**
- **Configure History Settings**

Delete browsing history

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Library' > 'History' > 'Clear Recent History'



- In the 'Clear Recent History' dialog, select the period that you want to clear history from the 'Time range to clear' drop-down box.
  - Leaving this at the default of 'Everything' will clear all history information in your browser.
- Click 'Details' to display the items from which you can select for the history information to be removed.



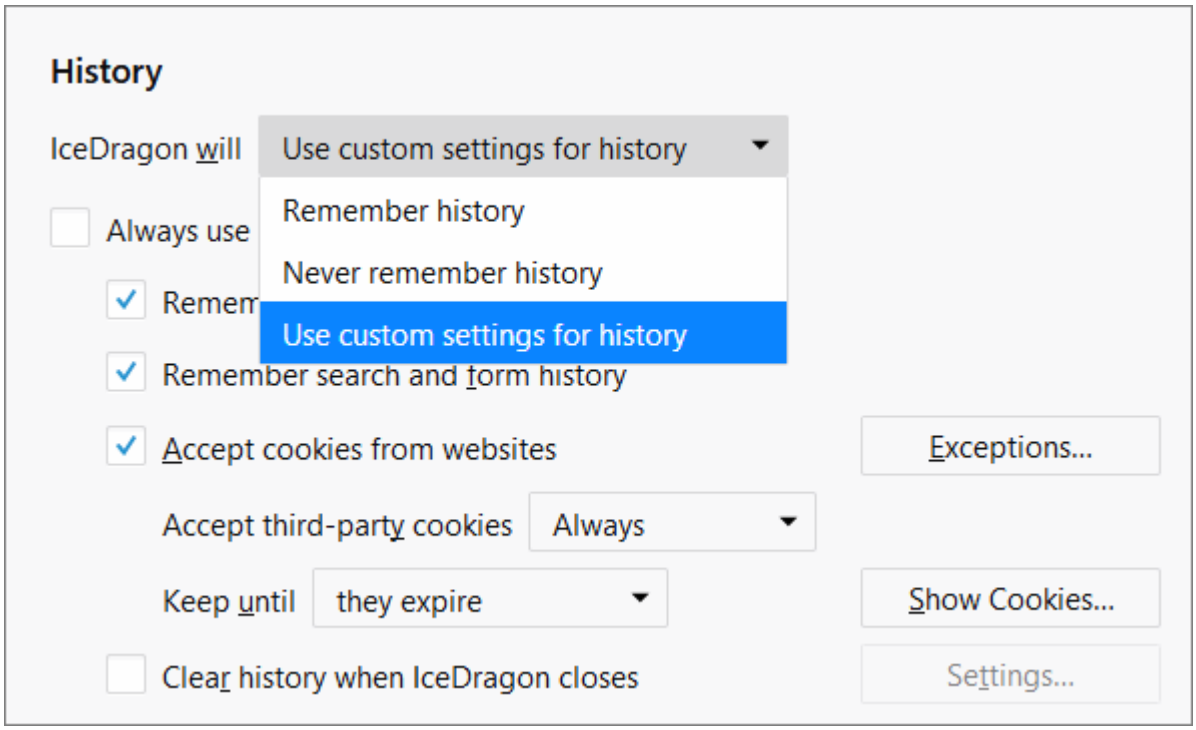
- Select the items you wish to delete and click 'Clear Now'. The following items can be deleted:
  - **Browsing and Download History** – Browsing history is the list of websites that you've visited and the download history is the list of files that you've downloaded.
  - **Form and Search History** – Form history are the list of terms that you've entered in web page forms and these terms will be listed in a drop-down menu in the Auto Form Fill as you start entering the first few letters in the form field.
  - **Cookies** - Cookies are small pieces of information sent by websites that you've visited which are stored by your web browser. Cookies are used by these websites to store your preferences about that website (for example, if you ask a website to 'Keep me logged in' or similar, it is the cookie that keeps a record of this preference).
  - **Cache** - The cache memory stores temporary files, such as of web pages that you've visited, which will help to load the pages much faster when you are visiting any of them once again.
  - **Active Logins** - Authenticated sessions that are still active, that is, if you've logged into a website that requires authentication, are called active logins.
  - **Offline Website Data** - If you've saved a webpage as 'Web Page, complete' in the save as option in the 'File' menu, you can view the page even if you are not connected to the internet.
  - **Site Preferences** - Settings configured by you for certain websites such as zoom level and permissions.

Configure history settings

The 'Privacy and security' section of 'Options' allows you to specify default 'History' settings for IceDragon.

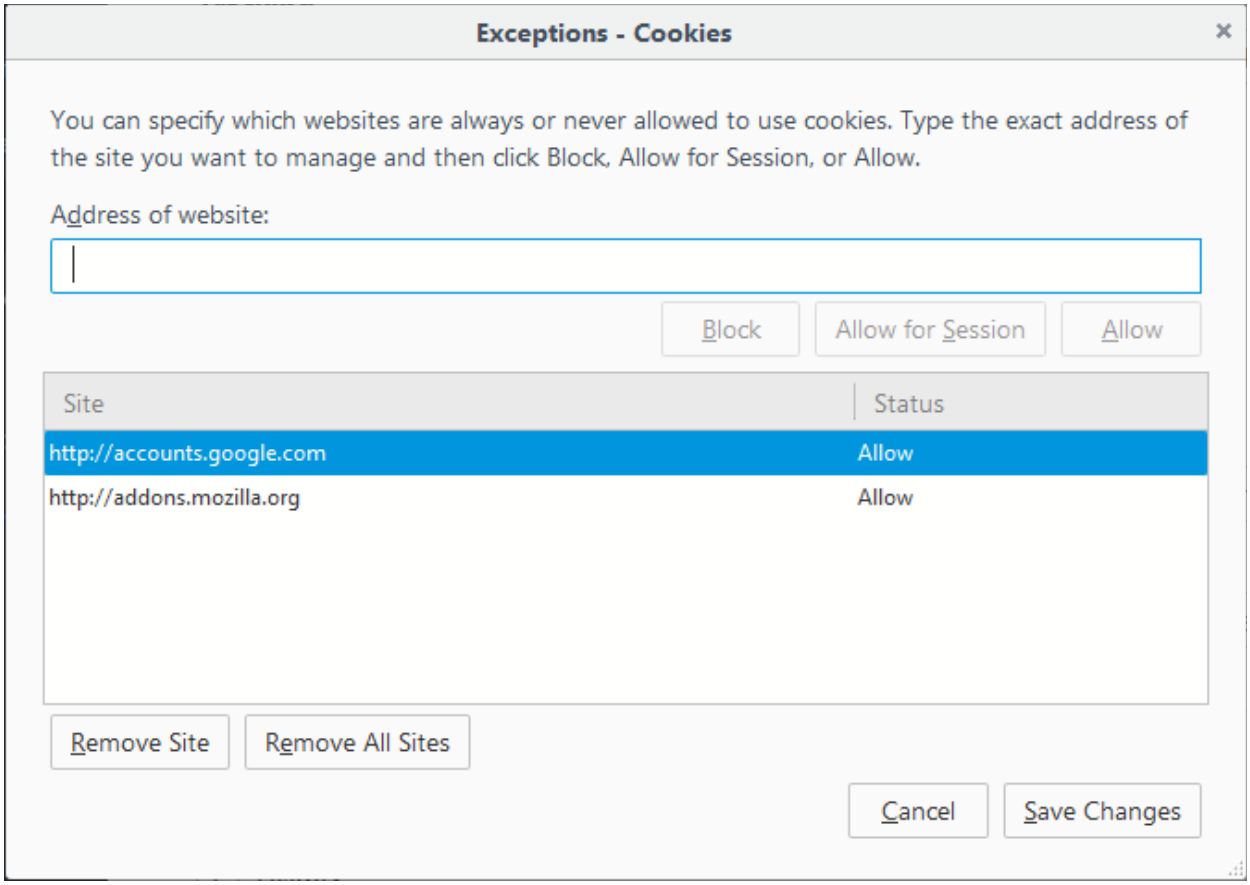
To configure these settings

- Click the hamburger/'Open Menu' button at the top-right corner
- Select 'Options' then the 'Privacy and security' tab
- In the 'History' section, specify default behavior in the 'IceDragon will:' drop-down



The options available are:

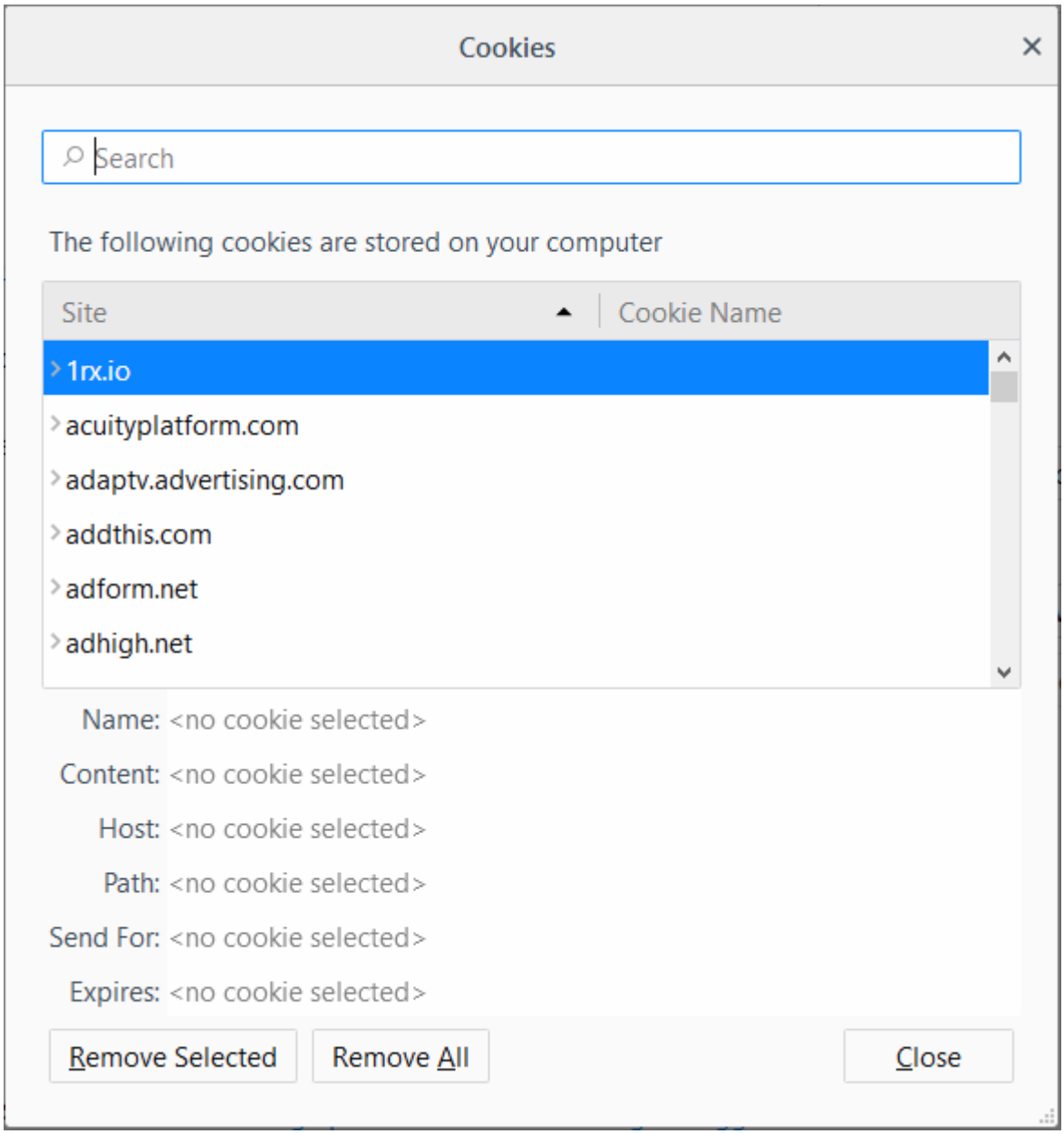
- **Remember history** – The browser will always remember history and you have to clear it manually as explained in the first half of this page.
- **Never remember history** – The browser will never store any history.
- **Use custom settings for history** – If you select this, you have the following options:
- Always use private browsing mode – If you select this option, IceDragon will always open in private browsing mode. See '**Private Browsing**' for more details.
- In the 'Always use private browsing mode' select 'Accept cookies from sites'. This allows the browser to accept first-party and third-party cookies from the websites that you visit.
    - The 'Exceptions...' option configures which websites are allowed, blocked or for that session only to use cookies irrespective of whether you choose 'Accept cookies from sites' or not.



Enter the exact address of the website in the 'Address of website' field' and select any of the options:

- **Block** – The browser never allows any cookies from that website.
- **Allow for Session** – The browser allows cookies for that session only and not stored.
- **Allow** – The browser allows cookies and stores the cookies permanently until cleared manually.

- Select site you want to remove a site from the list and click the 'Remove Site' button.
- To remove all the sites, click the 'Remove All Sites' button from the exceptions list.
- To view the cookies that are stored in your browser, click the 'Show Cookies' button.



In the 'Cookies' screen, you can view the details of the cookies.

To delete cookies

- Select the site whose cookies you want to delete and click 'Remove Selected'
- Click 'Remove All' to delete all cookies.

7.3. Allow/Block Pop-up Windows

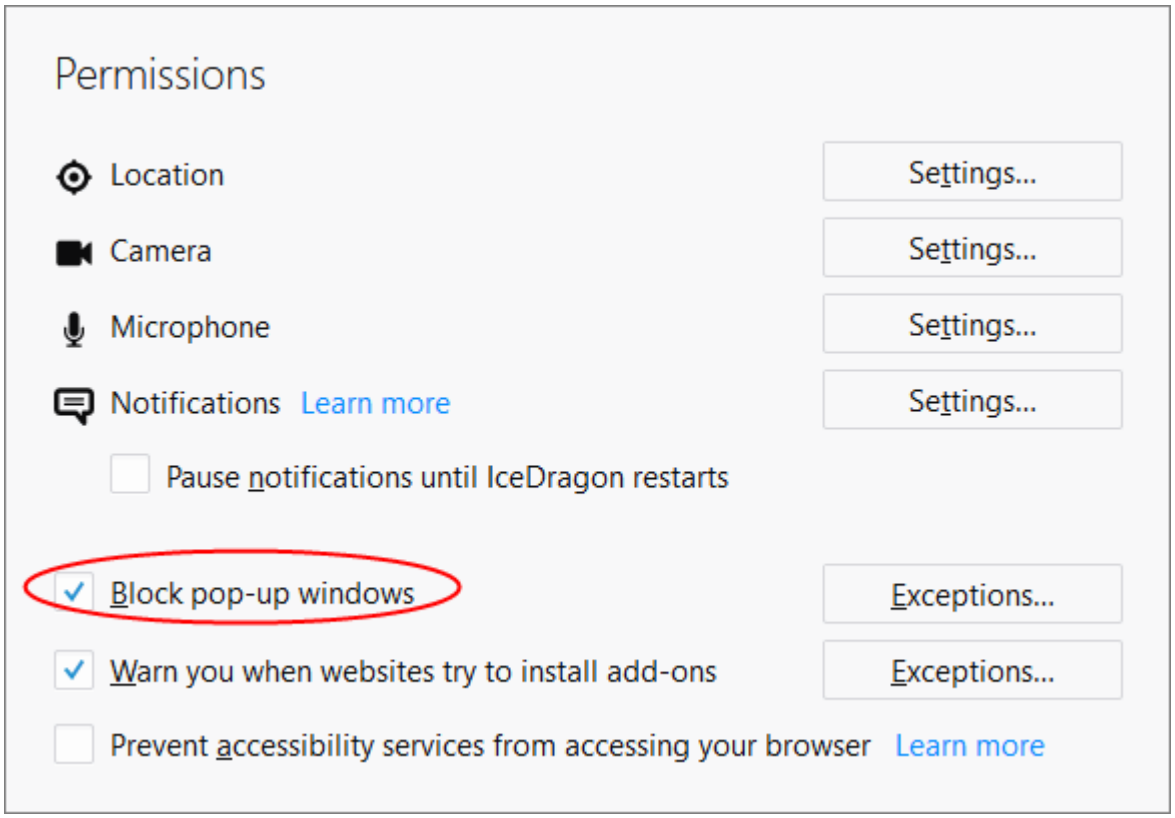
Many websites open pop-up windows to show adverts and other messages.

While many of them are used for genuine purposes (for example, banking sites use pop-ups for login screens and providing warnings), some may be used for malicious purposes like injecting rootkits, keyloggers and other malware. Other pop-ups can just be plain annoying adverts.

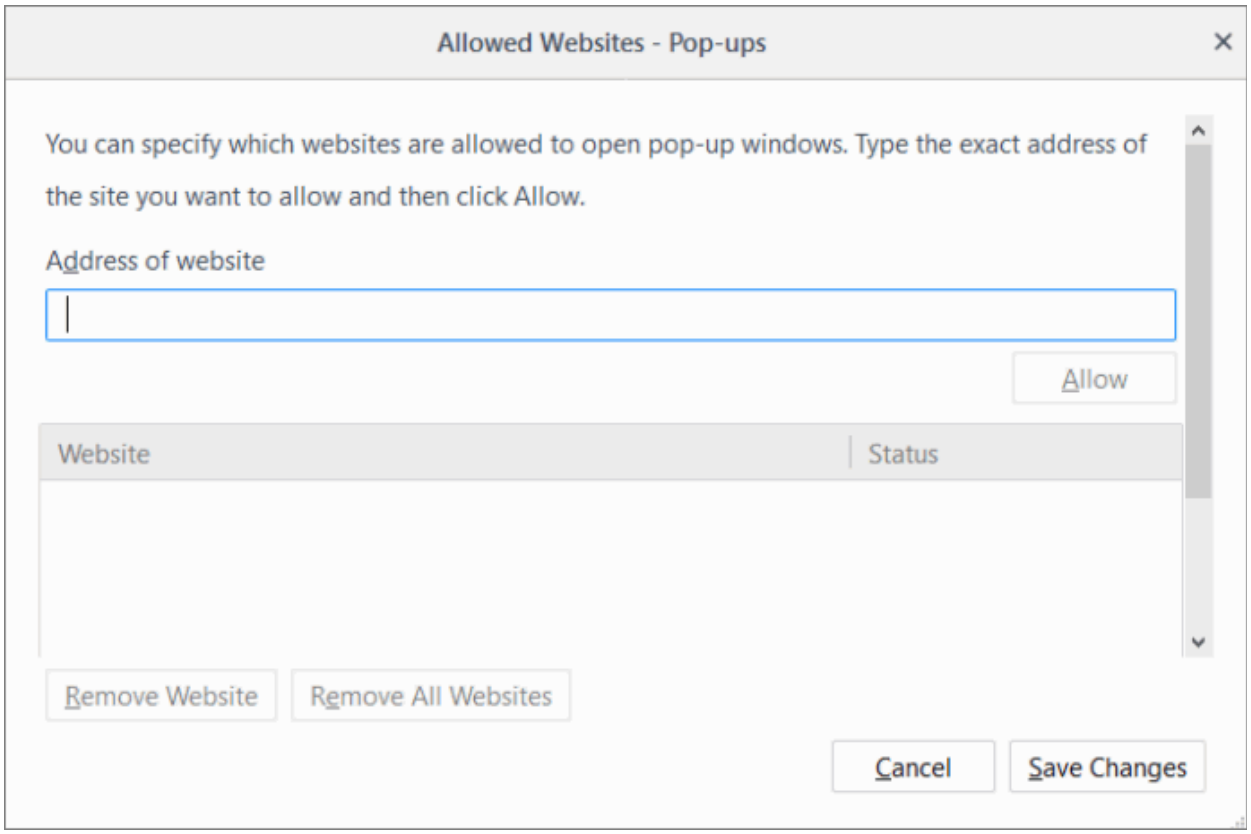
- Comodo IceDragon blocks pop-up windows by default.
- You can configure IceDragon to allow or block pop-ups as you wish and can add exceptions so that pop-ups from selected websites are always allowed.
- When a website tries to open a pop-up, IceDragon shows a message telling you the pop-up was blocked.

To configure pop-up windows

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' then 'Privacy and Security'
- To block pop-up windows, make sure the 'Block pop-up windows' box is enabled:



- To permanently allow pop-ups from all websites, deselect the check-box (not recommended)
- To add exceptions for pop-ups, click 'Exceptions'



- Enter the URL of the website for which you want to allow pop-ups permanently in the 'Address of website' field and click 'Allow'

The site will be added to the list of websites which are allowed to show pop-ups. All the pop-up windows opened by this website will be allowed regardless of your setting in 'Block pop-up windows' check box.

- Click 'Save Changes'.

7.4. Manage Cookies

- Cookies are small files stored in your browser by websites that you've visited. They contain information about your website preferences and can sometimes be used to authenticate you.
  - For example, if you ask a website to 'Remember me' or similar, it is the cookie that keeps a record of this preference.
- Most cookies are stored for the worthwhile purpose of service improvement, but they can also be used to track you and record data. Examples:
  - Session cookies allow a website to remember your page changes and selections as you move from page-to-page. A shopping cart is a good example of this usage.
  - A search engine may store cookies to fetch your search history and will display targeted adverts to you on various web-pages you visit.
  - Some malicious sites may use cookies to log sensitive information about you. Hackers could, in theory, intercept a cookie sent from your browser to a website and extract sensitive data.
- To maintain your privacy and security, you need to clear cookies from your browser periodically and evaluate your overall policy regarding allowing or blocking cookies.
- By default, IceDragon accepts cookies from the websites you visit. You can configure it to allow or block cookies , or to accept/block cookies on a per-site basis.

Click the links below for more help:

- **Clear Cookies**

- **View and remove stored cookies individually**
- **Allow / block cookies**
- **Add exceptions for storing cookies**

Clear cookies

Cookies are deleted when you clear your browsing history.

If you want to manually clear cookies:

- Click the hamburger/'Open Menu' button at top-right.
- Select 'Options' > 'Privacy and Security'.
- Go to the 'History' section
- 'Ice Dragon will' section. Select one of the following:
  - 'Never Remember History' - Ice Dragon will delete all cookies and browsing history when you close the browser.
  - 'Remember History' - Ice Dragon will retain cookies and browsing history from websites you visit
  - 'Use Custom Settings' – Choose exactly which items are remembered by Ice Dragon.

Remember History

If 'Remember history' is chosen,

- To delete the browsing history along with the cookies click the link '**clear your recent history**'
- To delete cookies individually, click the link 'remove individual cookies'. The cookies dialog allows you to remove cookies individually. See '**View and remove stored cookies individually**' for more details.

Never remember history

If 'Never remember history' is chosen,

- Cookies are automatically deleted, along with your browsing history, when you close Ice Dragon. You can manually delete them by the hamburger button > 'Library' > 'History' > 'Clear recent history'

Use custom settings for history

If 'Use custom settings for history' is chosen,

- Click 'Show Cookies'. The 'Cookies dialog allows you to remove cookies individually. See '**View and remove stored cookies individually**' for more details.

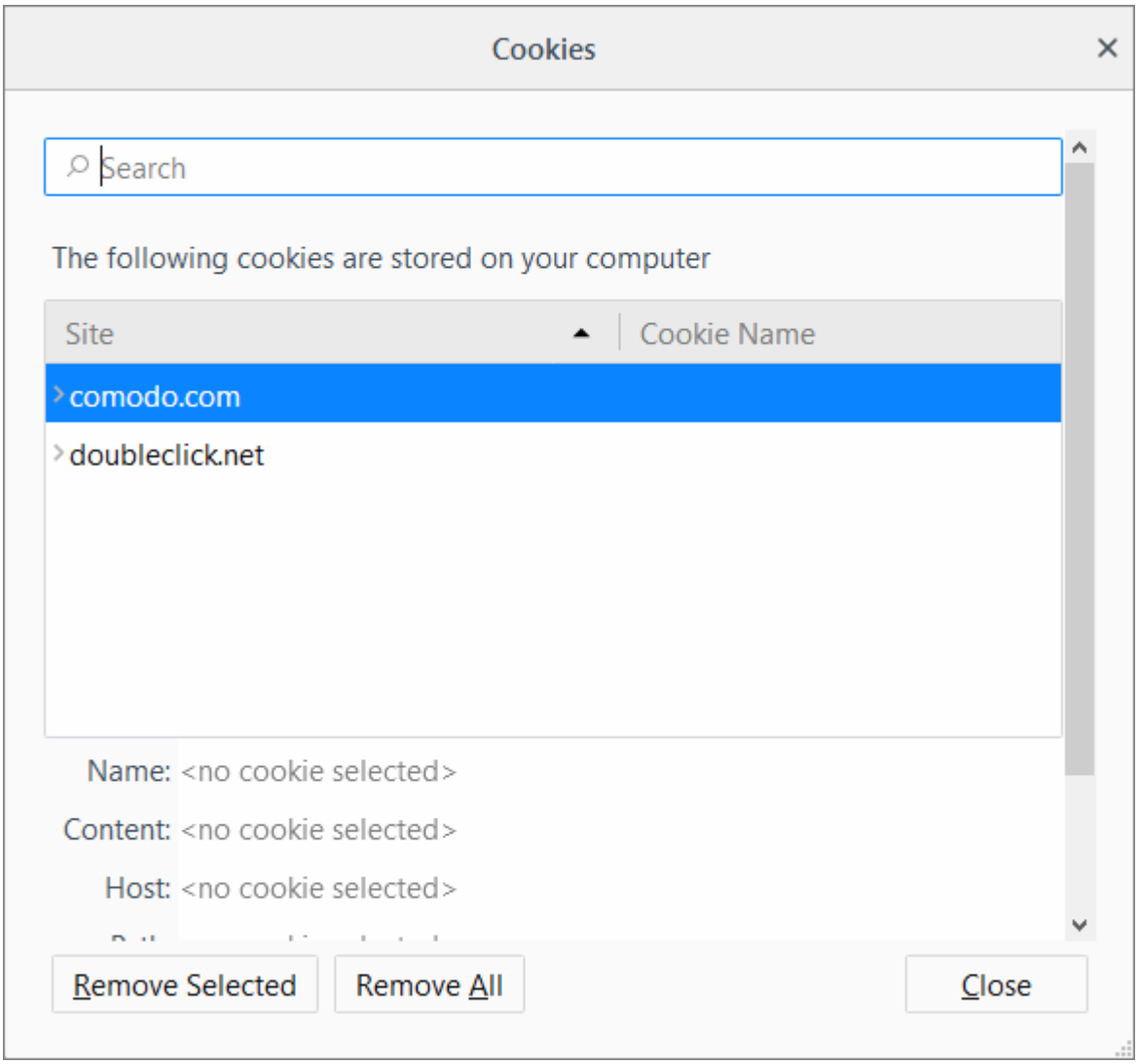
View and remove stored cookies individually

The 'Cookies' dialog displays a list of cookies stored in your browser and enables you to remove them selectively.

To access cookies dialog

- Click the hamburger/ 'Open Menu' at the top-right
- Choose 'Options' > 'Privacy and security' > 'History'
- Select 'Remember History' for 'IceDragon will:'
- Click the 'remove individual cookies' link

  OR
- Select 'Use custom settings for history' for 'IceDragon will:', click 'Show Cookies' button

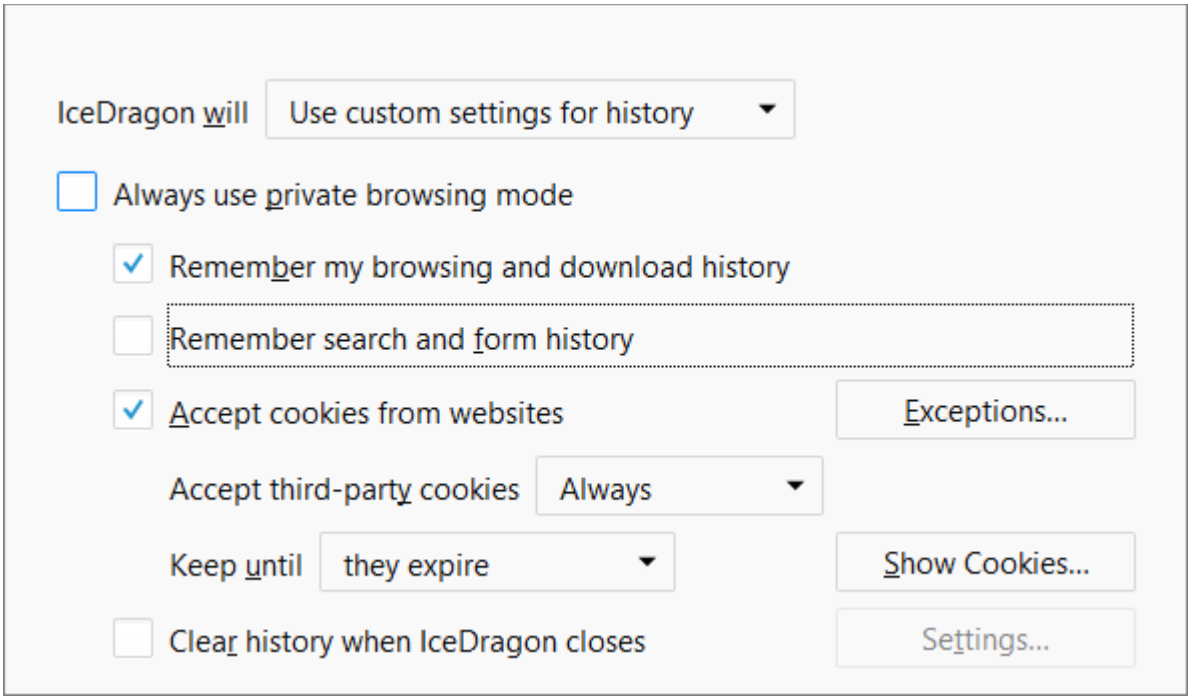


The dialog displays the list of stored cookies stored by different websites you have visited.

- Select a cookie to view details about it in the lower pane.
- To delete a cookie, select it and click 'Remove Selected'.
- To remove all the cookies at once click 'Remove All'.
- Click 'Close'.

Allow / block cookies

- Click the hamburger/ 'Open Menu' button at the top-right corner the select 'Options' > 'Privacy and Security'.
- Under 'History' for 'IceDragon will:', select 'Use custom settings for history' from the drop-down:



To allow cookies from the websites

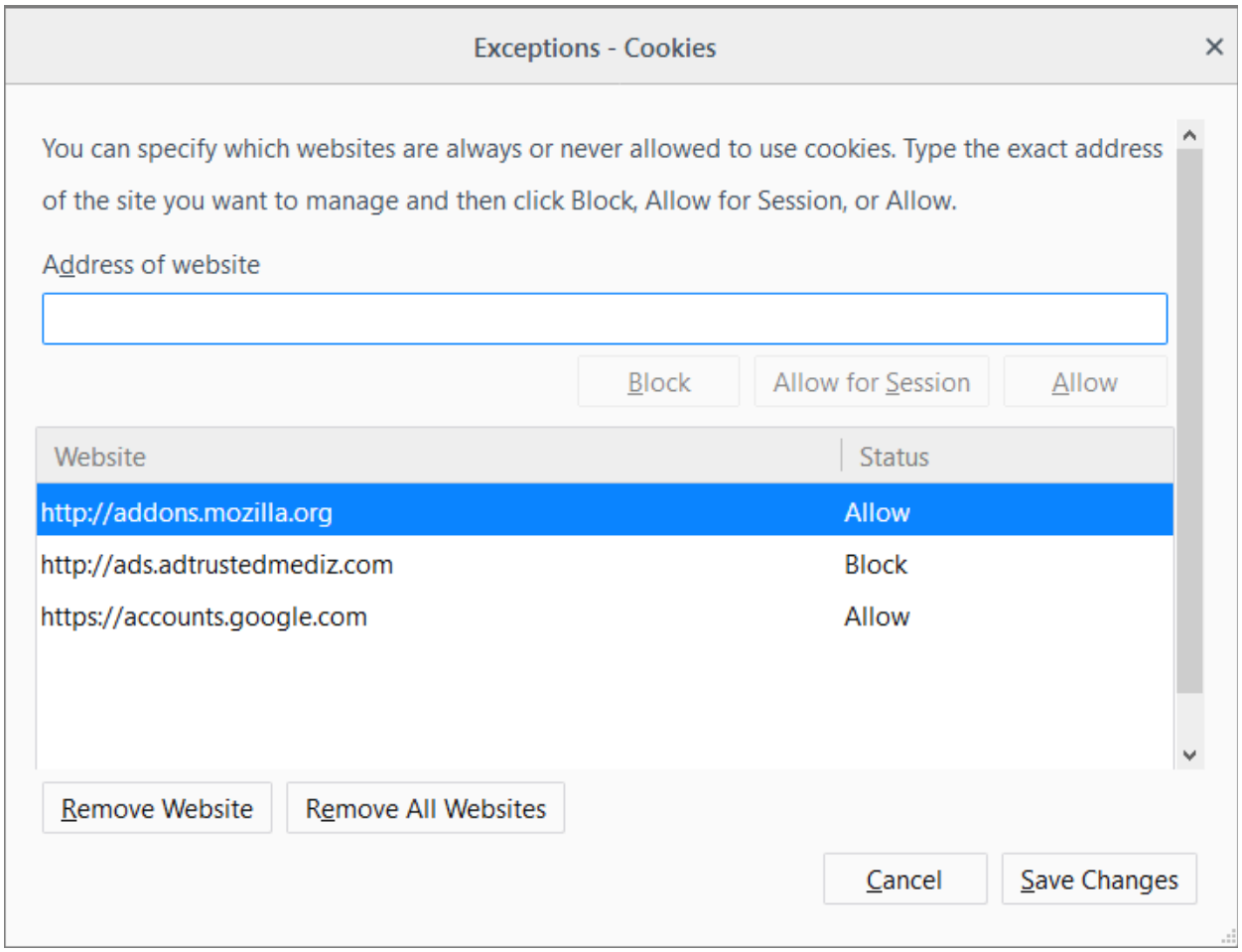
- Leave the 'Accept cookies from sites' checkbox selected.
- If you want to allow third-party cookies, that is the cookies set by other applications or websites through the website you visit, select the 'Accept third-party cookies:' checkbox.
- Select the time period for the life time of the third-party cookies from 'Keep until' drop-down:
  - they expire – Third-party cookies will be stored in your browser till their life time as set by the website
  - I close IceDragon - Third-party cookies will be removed once you end your browsing session

To block cookies from the websites

- Deselect the 'Accept cookies from sites' checkbox

Add exceptions for storing cookies

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Options' > 'Privacy and Security'.
- Under 'History' for 'IceDragon will', select 'Use custom settings for history' from the drop-down.
- Click 'Exceptions' beside 'Accept cookies from sites' checkbox.



- Enter the url of the website for which you want to allow or block cookies permanently.
- Click 'Block' to stop the cookies from the site. Regardless of whether the checkbox 'Accept cookies from sites' is checked or not, the cookies from this site will be blocked.
- Click 'Allow for Session' to allow the cookies from sites and remove them when IceDragon closes.
- Click 'Allow' to allow the cookies from the site. Regardless of whether the checkbox 'Accept cookies from sites' is checked or not, the cookies from this site will be allowed.

The website will be added to the list with the 'Allow', Allow for Session or 'Block status' as specified.

- To remove a specific website from the exceptions list
  - Select the website and click 'Remove Website'
- To remove All websites at once from the exceptions list, click 'Remove All Websites'
- Click 'Save Changes'

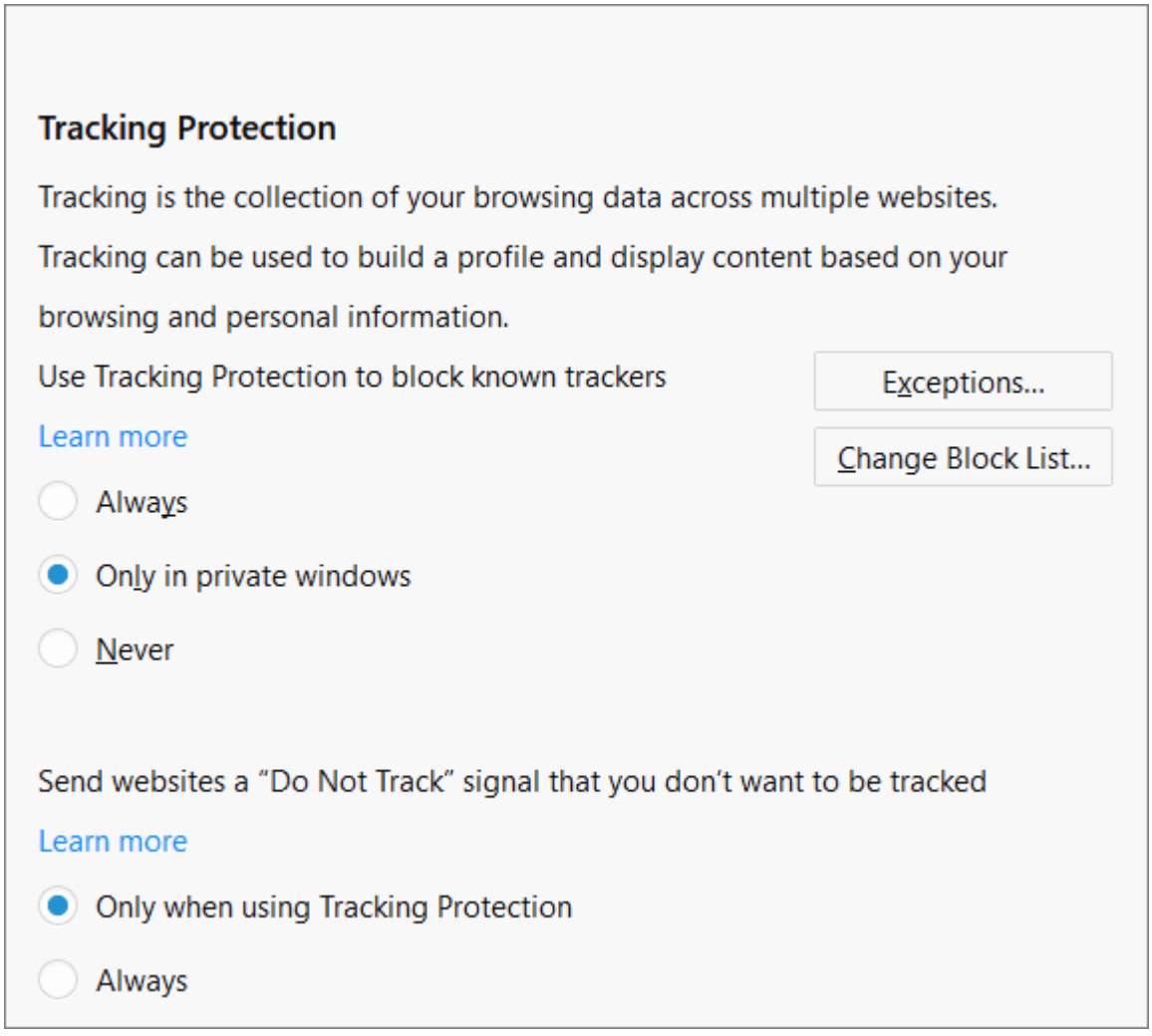
7.5. Block Websites from Tracking your Browsing Activities

To configure tracking protection:

- Click the hamburger icon
- Click 'Options'
- Click 'Privacy and Security'
- Scroll down to the 'Tracking Protection' section

Some websites record the browsing activities of visitors. For example, a web site may track your activity to find your interests and display relevant content and advertisements. While this can make for a more personalized online experience, it can also allow websites to build a potentially invasive profile of your online activity.

- Tracking protection prevents known trackers from from recording your online behavior. A shield icon appears in the address bar whenever Ice Dragon blocks a tracker.
- The 'Tracking protection' section lets you configure how you want to deploy this feature:



- **'Always'** - Ice Dragon will block trackers at all times in both normal and private browsing sessions.
- **'Only in private windows'** - Ice Dragon will allow trackers in normal sessions but block them in private sessions.

Tracking protection is automatically enabled in private browsing sessions. Disabling it will apply only to the current session. It will be re-enabled when you begin your next session.

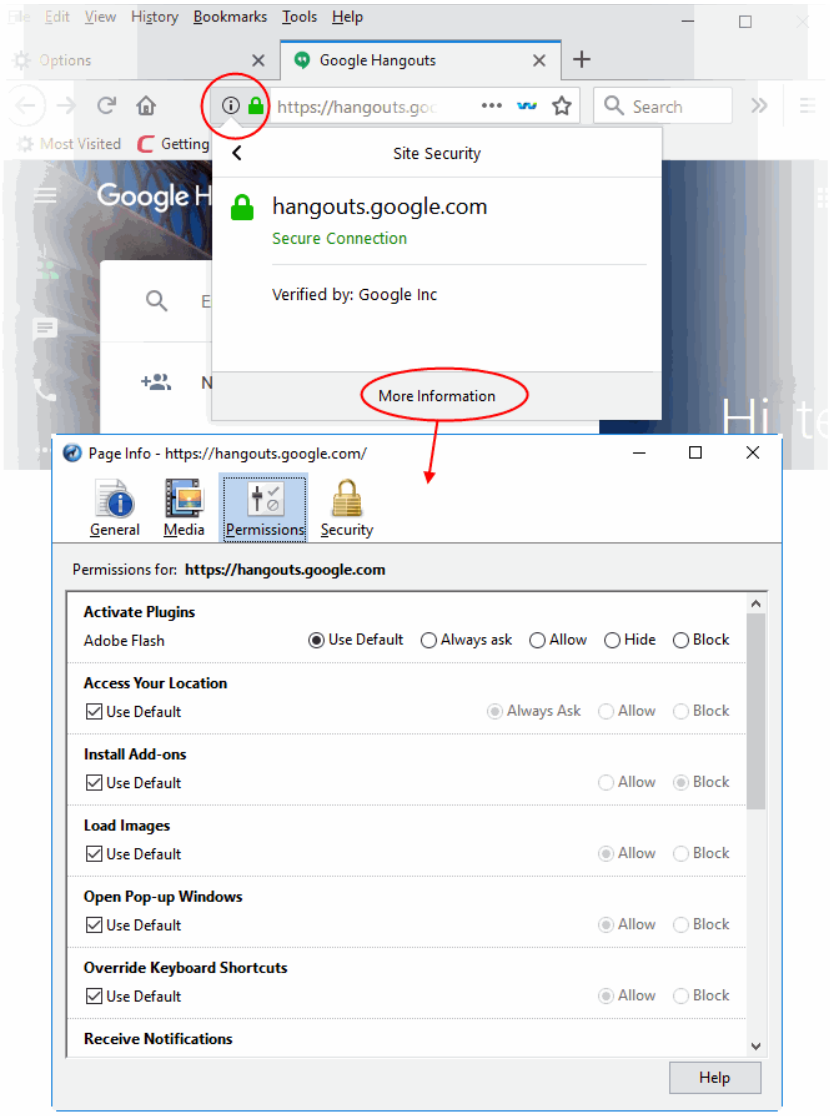
- **'Never'** - Trackers are permitted in both normal and private browsing sessions.

- **'Do Not Track'** - An Ice Dragon setting that tells websites you visit that you do not want them to monitor or record your behavior.
  - **'Only when using Tracking Protection is enabled'** - Will send the 'Do not track' command if tracking protection is active for your browsing session.
  - **'Always'** - Will send the 'Do not track' command to every site you visit during both regular and private browsing sessions.
- **Exceptions** – A shield icon that appeared in your address bar indicates a blocking tracker on a site. All sites that allowed tracking list in the 'Exceptions – Tracking Protection' dialog.
  - To remove a site from exceptions
  - Click the shield icon again and click 'Enable Protection'

    OR
  - In the 'Exceptions – Tracking Protection', select a site and click 'Remove Website'
  - To remove all sites from exceptions, click 'Remove All Websites'
  - Click 'Save Changes' to save settings.

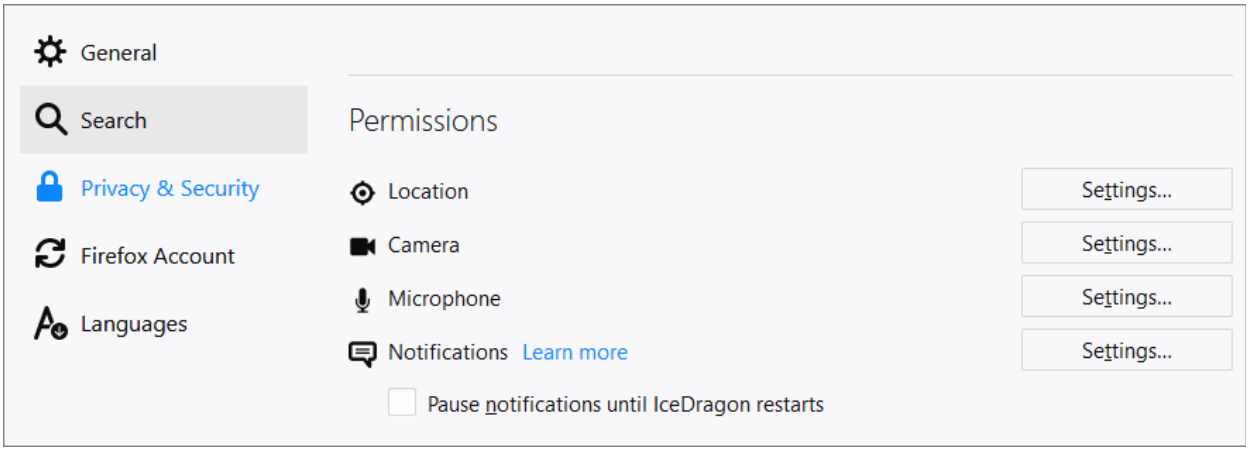
7.6. View and Manage Permission Settings

- By default, Ice Dragon will ask your permission every time a site requests your location, or to access your camera/microphone, or to send you notifications.
- You can allow or block the request as you deem appropriate.
- Permission settings let you view all websites that have made such requests, and view/modify your settings for each site.
  - Tip. You can view the permissions you have given to a specific site by clicking the information icon next to the address bar:



To access permissions settings

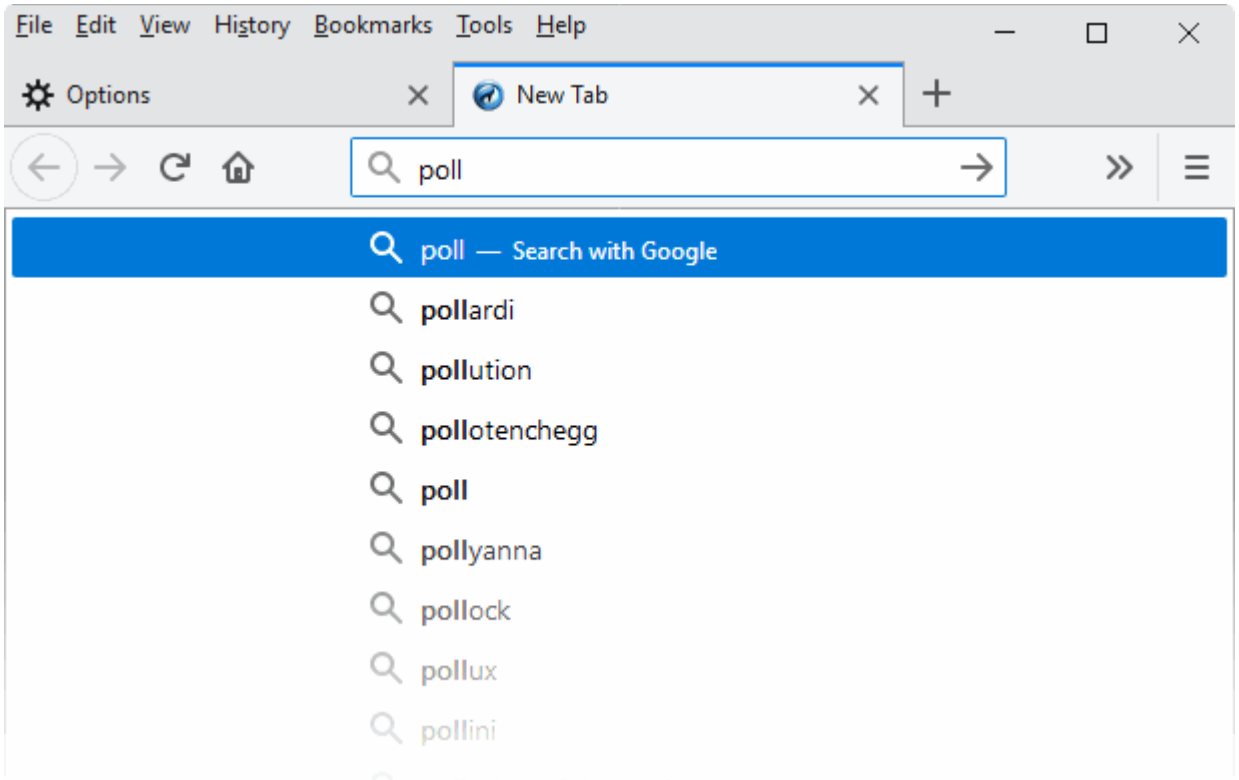
- Click the hamburger icon
- Click 'Options'
- Click 'Privacy and Security'
- Scroll down to the 'Permissions' section



- Location - Determines whether or not a website is allowed to request and learn your current location. You can revoke this permission for all sites you visit or for specific sites.
- Camera / Microphone – Manage permissions for a specific or all pages to which it is allowed / blocked to use camera / your microphone. This applies to video or image / recording sites available.
- Notifications – Set whether or not to receive notification from a website. A website which is allowed to send notifications can send you in-browser messages related to their services. These are shown even if you are not on their website at the time.
    - Pause notifications until IceDragon restarts – You will not be sent any more notifications during this session. Notifications will only resume after Ice Dragon is restarted.

7.7. Configure Suggestions when Entering a Website Address

- Ice Dragon uses your browsing history and bookmarks to provide suggestions when you start typing an address in the address bar.
- Simply click on one of the suggestions to visit that page.



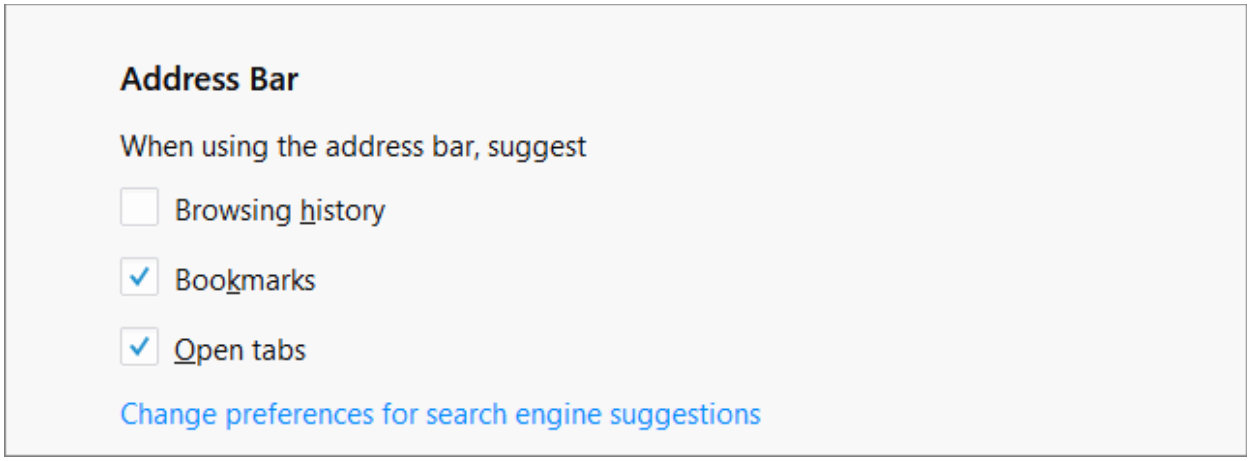
Click the following links to find out more:

- **Configure suggestions**
- **Exclude a website from suggestions**
- **Exclude a single webpage from suggestions**

Configure Suggestions

IceDragon allows you the select the sources from which suggestions are drawn, or to stop suggestions altogether.

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Options' > 'Privacy and Security'



- Under 'Address Bar', select the option for 'When using the location bar, suggest'
  - Browsing History - Provides suggested sites from your browsing history only.
  - Bookmarks - Provides suggested sites from your bookmarked sites only.
  - Open tabs – Provides suggested sites from open tabs only.

Exclude a website from suggestions

Allows you configure IceDragon to block suggestions from a specific website.

- Click the hamburger/ 'Open Menu' button at the top-right corner and select 'Library' > 'History'.
- Click 'Show All History' at the bottom of the menu.
- In the 'Library' interface use the 'Search History' at top-right to find a web site.
- Right-click on a website page and select 'Forget About This Site' from the context sensitive menu.
- Ice Dragon will no longer suggest pages from the website.

Exclude a single webpage from suggestions

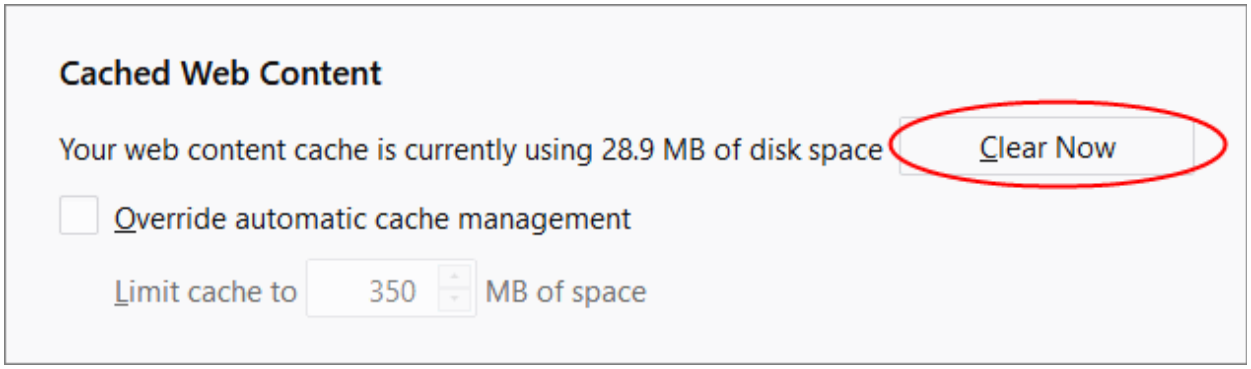
- Type a part of the webpage address in the address bar.
- Hover your mouse cursor over the suggestion you want to exclude and press 'Delete' key from the keyboard.

7.8. Manage Cache

- The cache is a repository used to store web pages, images and other web content so that the page loads faster on future visits.
- The cache can grow quite large over time as it is used to store data from every website you visit.
- Periodically clearing the cache will free up space on your computer.
- This is also useful to remove corrupt data that is causing pages to load incorrectly.

Clear the cache

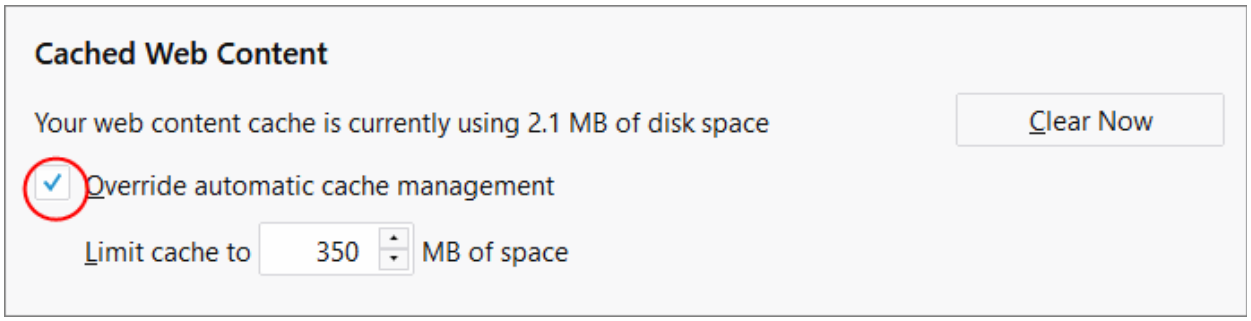
- Click the hamburger/ 'Open Menu' button at top-right
- Select 'Options' > 'Privacy and Security'
- Scroll to 'Cached Web Content'
- Click 'Clear Now'



Cached Web Content Management

Comodo IceDragon stores web pages you visit in a dedicated cache so that the page loads quicker when you visit it in future. The default disk space for the cache storage is 350 MB.

- You can re-configure the disk space allotment for the cache storage through 'Cached Web content' settings.

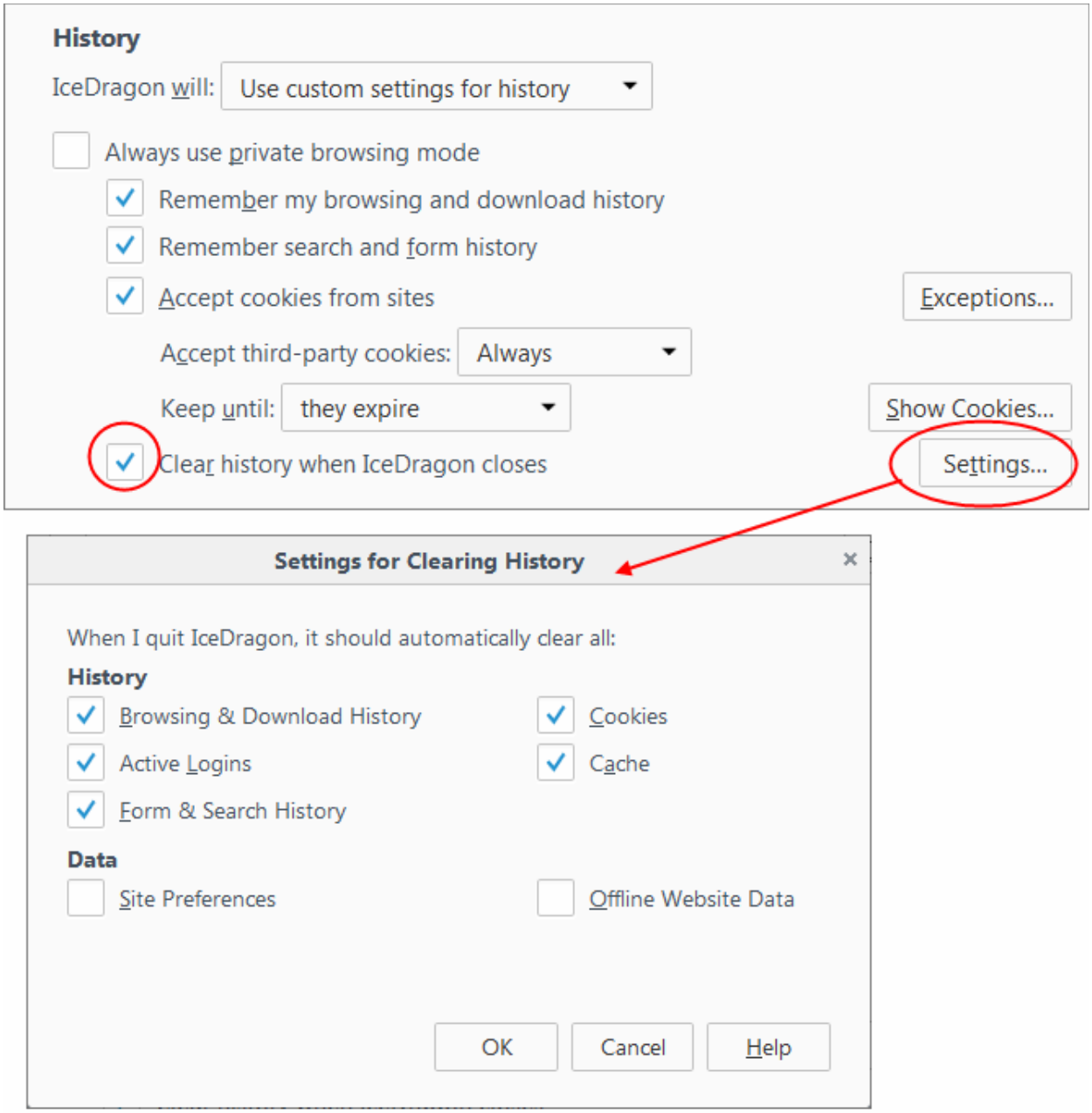


Change the default disk space for cache storage

- Click the hamburger/ 'Open Menu' button at top-right
- Select 'Options' > 'Privacy and Security'.
- Check the 'Override automatic cache management' box under the 'Cached Web Content'.
- Specify the new disk size (in MB) in the 'Limit cache to' combo box.

Automatically clear the cache

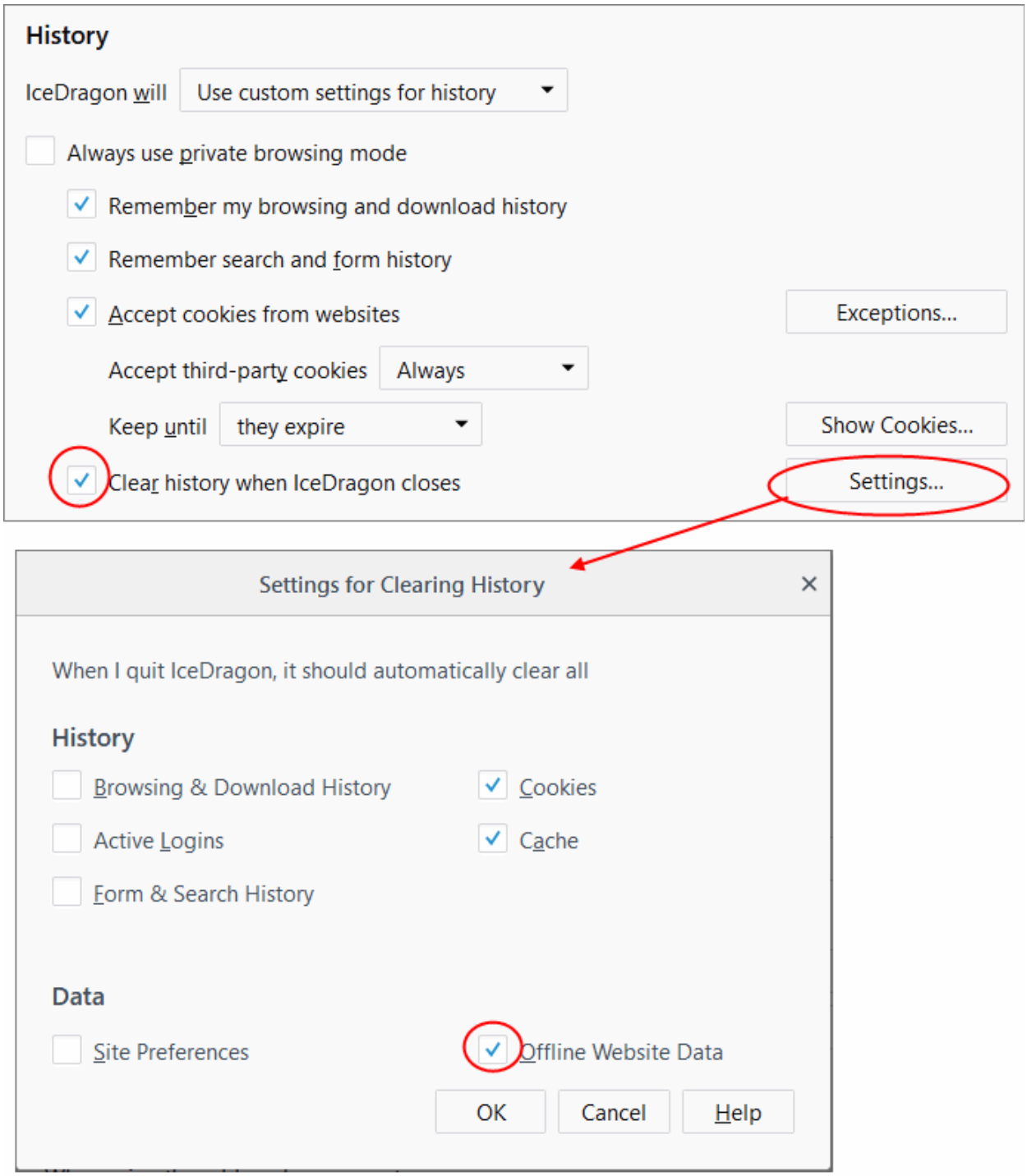
- Click the hamburger/ 'Open Menu' button at top-right
- Click 'Options' > 'Privacy and Security'.
- Go to the 'History' section.
- 'IceDragon will' - Select 'Use custom settings for history'
  - Enable 'Clear history when IceDragon closes'
  - Click the 'Settings' button next to it
  - Make sure the 'Cache' box is checked:



- Click 'OK' to apply your changes.

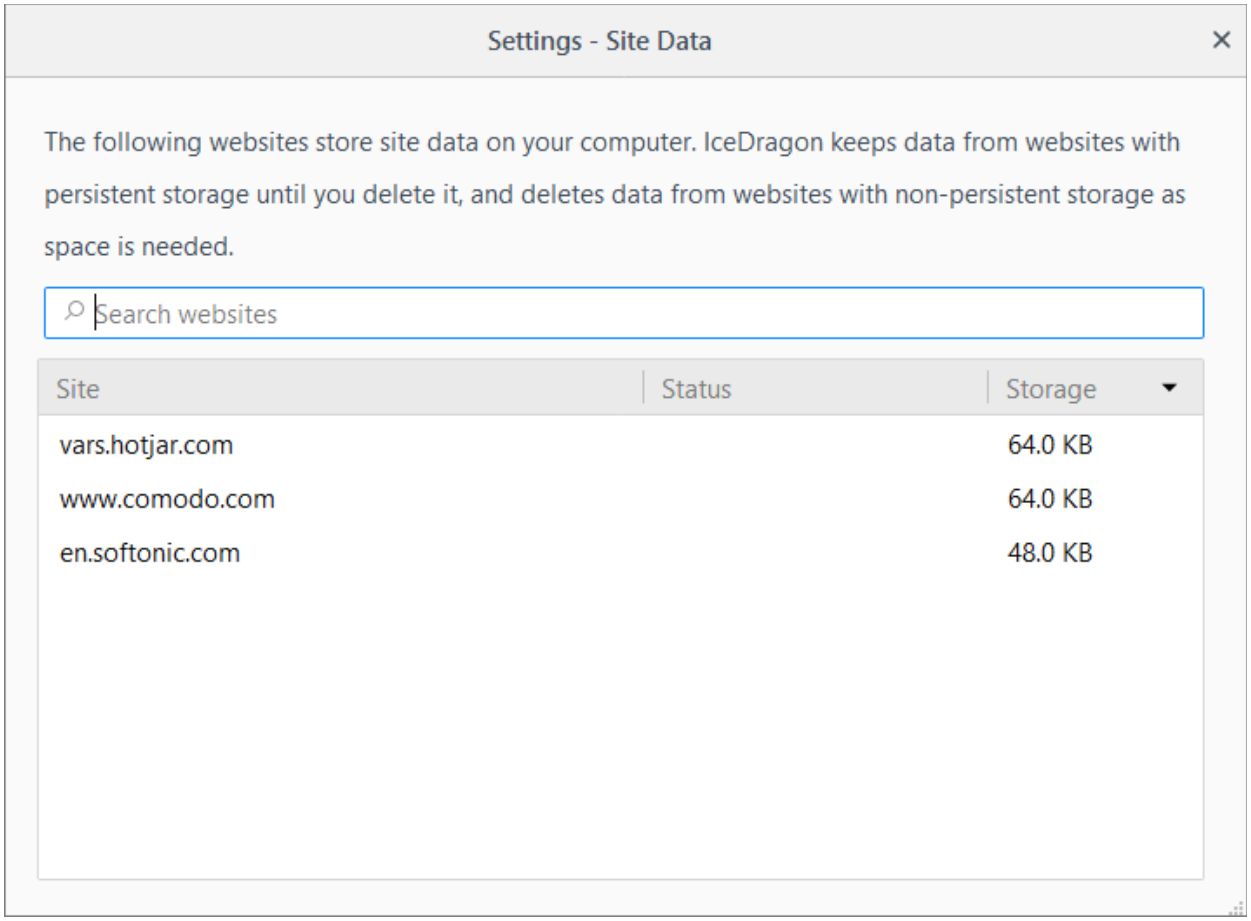
Offline Web Content and User Data Management

Some websites store user data on your computer for offline use. You can delete this offline data if required.



To remove site data from storage

- Click the hamburger/ 'Open Menu' button at top-right
- Click 'Options' > 'Privacy and Security'
- Go to the 'Site Data' section.
- Select 'Clear All Data'
    - Click 'Settings' to open the 'Settings – Site Data' dialog

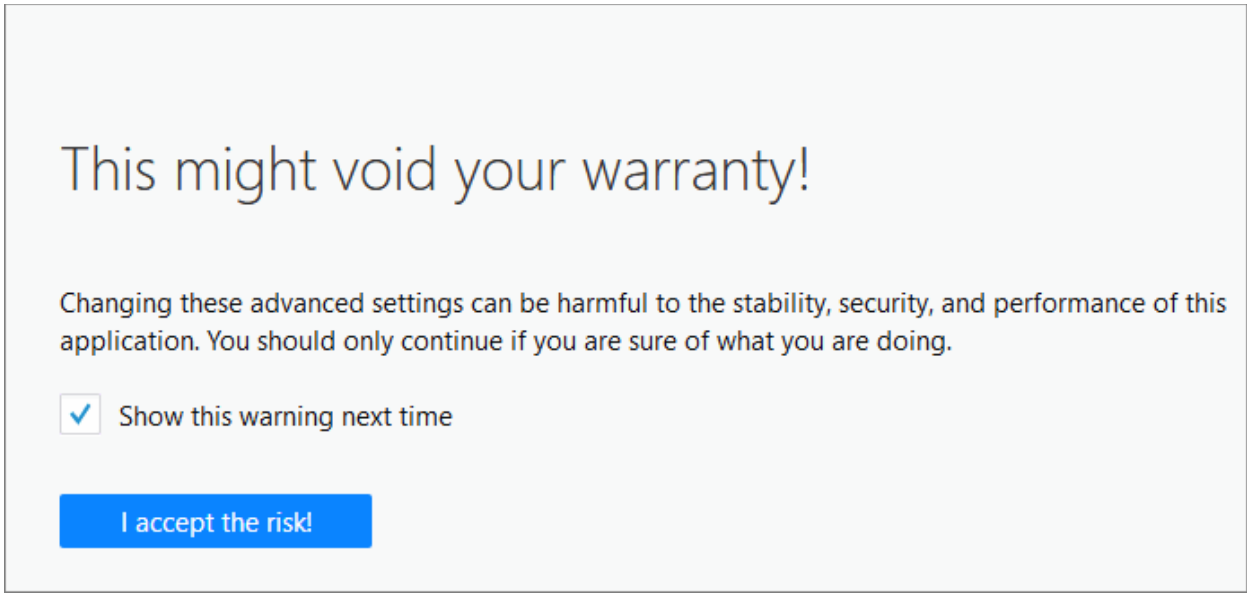


- The interface shows list of sites that have stored their data. You can search the list for a specific username or website by entering it fully or partially in the search bar.
- Select the site whose data you want to delete and click 'Remove Selected'
- Click 'Remove All' to delete all site data.
- Click 'Save Changes'.

To remove the cache from the About Config page

- Type `about:config` in the address bar and press 'Enter'.

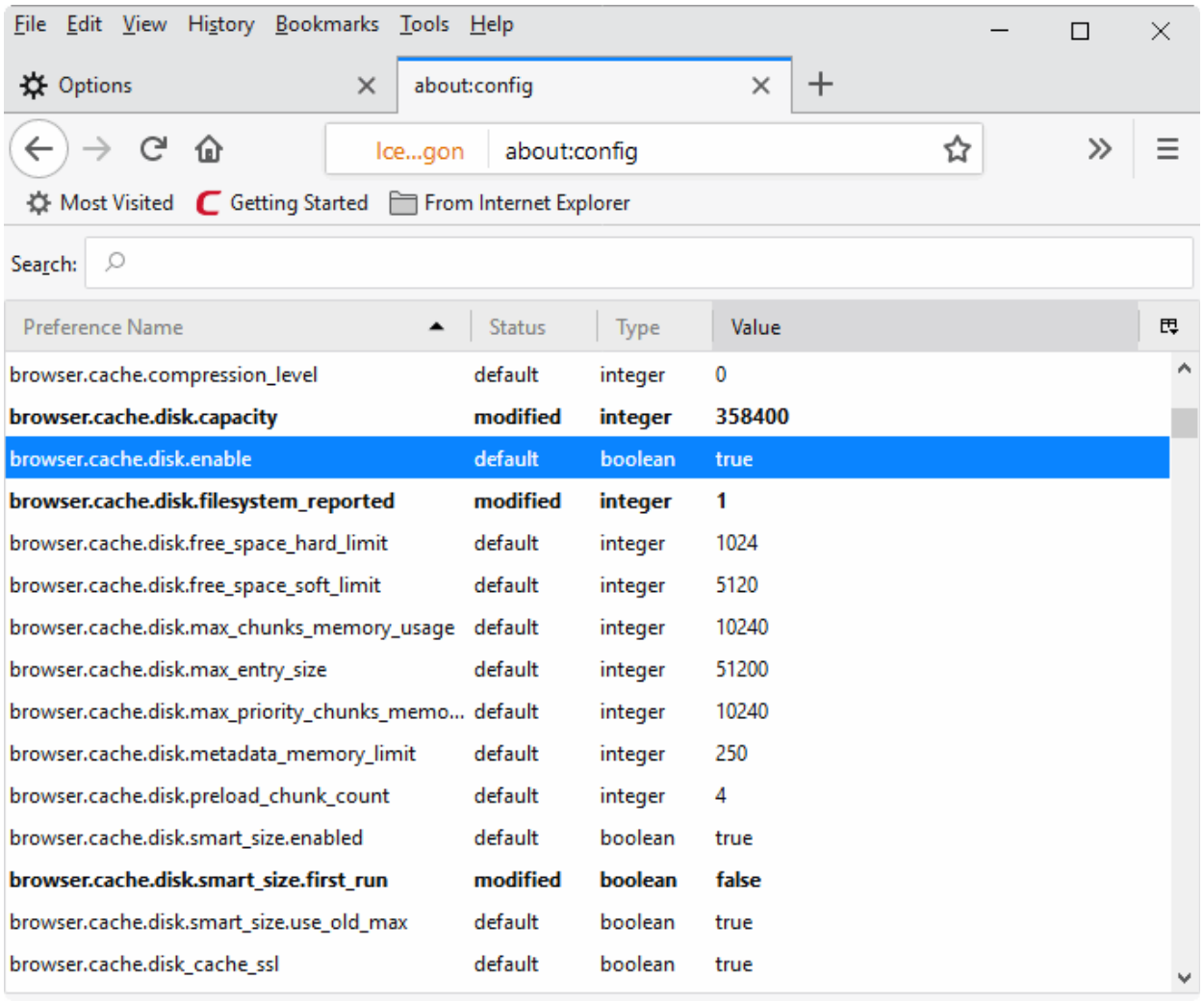
A warning will open:



- Click 'I accept the risk!'

The configuration page will open:

- Type 'browser.cache' in the search field then double click in the **browser.cache.disk.enable** and **browser.cache.memory.enable** entry.
- Alternatively, right-click on **browser.cache.disk.enable** and **browser.cache.memory.enable** and select 'Toggle'.



Preference Name	Status	Type	Value
browser.cache.compression_level	default	integer	0
browser.cache.disk.capacity	**modified**	**integer**	**358400**
browser.cache.disk.enable	default	boolean	true
browser.cache.disk.filesystem_reported	**modified**	**integer**	**1**
browser.cache.disk.free_space_hard_limit	default	integer	1024
browser.cache.disk.free_space_soft_limit	default	integer	5120
browser.cache.disk.max_chunks_memory_usage	default	integer	10240
browser.cache.disk.max_entry_size	default	integer	51200
browser.cache.disk.max_priority_chunks_memo...	default	integer	10240
browser.cache.disk.metadata_memory_limit	default	integer	250
browser.cache.disk.preload_chunk_count	default	integer	4
browser.cache.disk.smart_size.enabled	default	boolean	true
browser.cache.disk.smart_size.first_run	**modified**	**boolean**	**false**
browser.cache.disk.smart_size.use_old_max	default	boolean	true
browser.cache.disk_cache_ssl	default	boolean	true

- Switch to 'false' value and restart the browser.

7.9. Manage Add-on Permissions

Add-ons are small pieces of software designed to expand the functionality of Ice Dragon. Add-ons are broadly classified as:

- **Extensions** - Add new features to the browser. Examples include extensions to auto-update Facebook profiles, analyze your typing skills, detect website trackers, compare prices from different e-merchants and more.
- **Appearance** - Customize how the browser should appear by applying themes and styles.
- **Plugins** - Support different kinds of file types from the internet. For example, to open .pdf files, play video and audio files, play online games and so on.

See '**Introduction to Add-ons**' for more details.

While most add-ons are genuine, some may be harmful, injecting rootkits, key-loggers and other malware.

Ice Dragon lets you choose the level of permission that websites have to install add-ons:

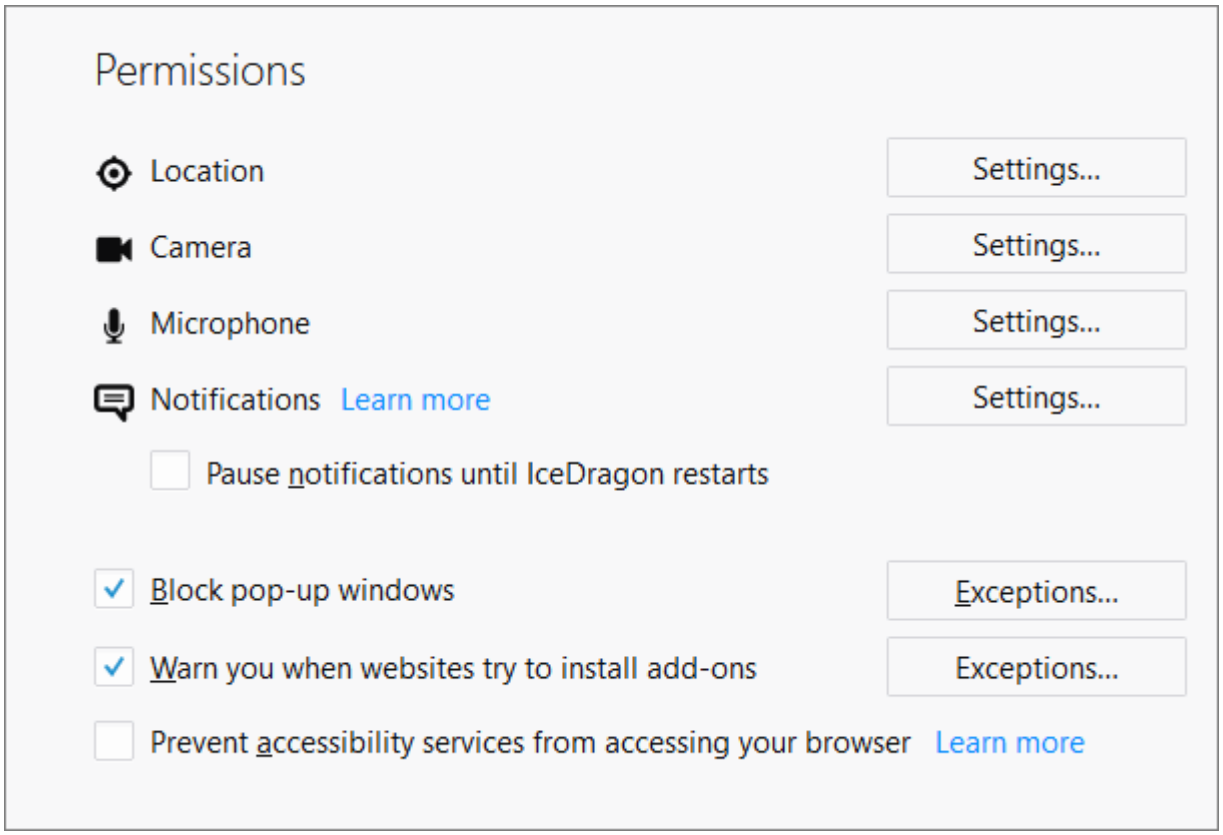
Click the links below for more help:

- **Allow/block automatic installation of Add-ons by websites**
- **Add exceptions for automatic Add-on installations**

To configure automatic installation of add-ons

1)

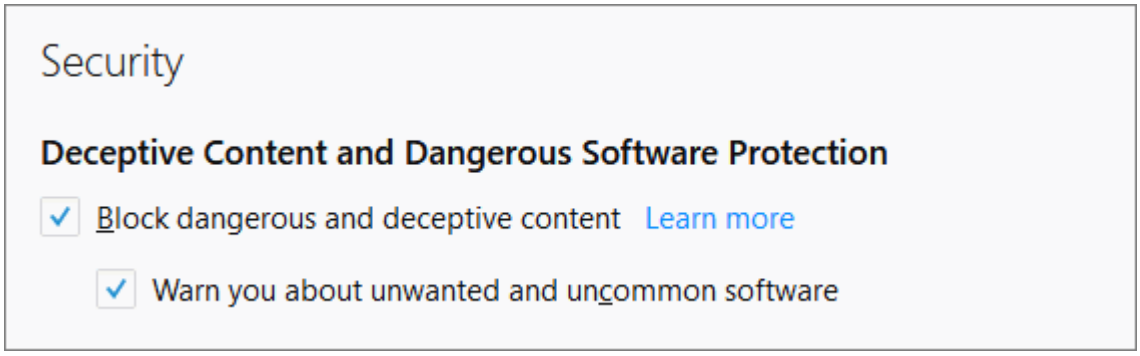
- Click the hamburger/ 'Open Menu' button in the top-right corner
- Select 'Options' > 'Privacy and Security' > 'Permissions'



- **Warn you when sites try to install add-ons'** – If enabled, you will see an alert if a site tries to install an add-on. You can decide whether to allow or block it.

2)

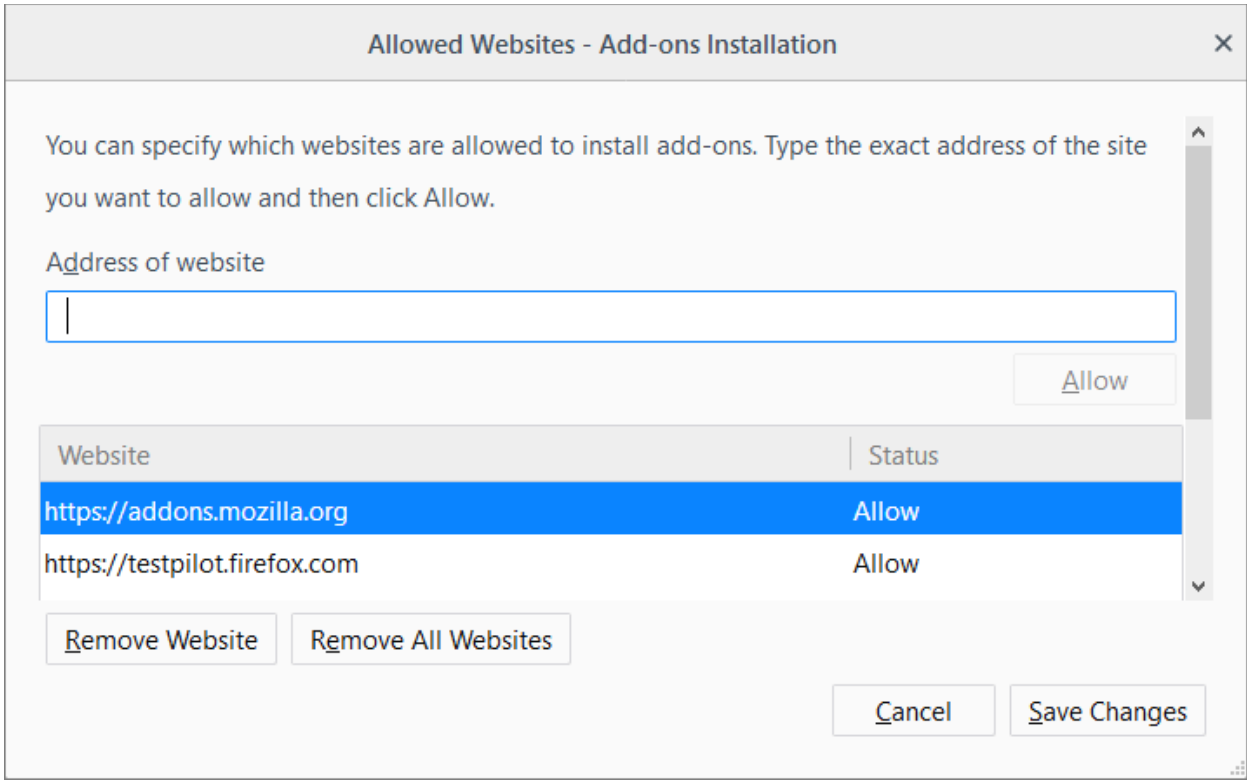
- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > 'Privacy and Security' >'Security'



- **Block dangerous and deceptive content** (aka 'Phishing', malware, attack sites, unwanted software) - Blocks unknown and sites,unwanted files and downloads. An alert will be displayed you if you try to connect to a dangerous site.
  - 'Block dangerous downloads' detects malicious executable files
  - 'Warm me about unwanted and uncommon software' alerts about potentially unwanted and uncommon downloads

To add exceptions for automatic installation of Add-ons

- Click the hamburger/ 'Open Menu' button at the top-right corner then select 'Options' > 'Security'
- Click 'Exceptions' beside the 'Warn me when sites try to install add-ons' checkbox



The exceptions dialog will open:

- Enter the url of the website for which you want to allow add-ons.
- Click 'Allow'. Regardless of whether the checkbox 'Warn me when sites try to install add-ons' is checked or not, the add-ons from this site will be allowed for automatic installation.

The website will be added to the exceptions list with the 'Allow' status.

- To remove a website from the exceptions list,
  - Click 'Exceptions' beside 'Warn me when sites try to install add-ons' .
  - Select the website and click 'Remove Site'.
  - To remove all the sites from the exception list, click 'Remove All Sites'.
- Click 'Save Changes'.

7.10. Manage Passwords

- IceDragon can securely remember your usernames and passwords and automatically enter them the next time you visit a website.
- This can be a great time saver but is not recommended for shared computers or public computers.

This page explains how the 'Remember' system works from a user point of view before explaining how you can configure advanced password settings.

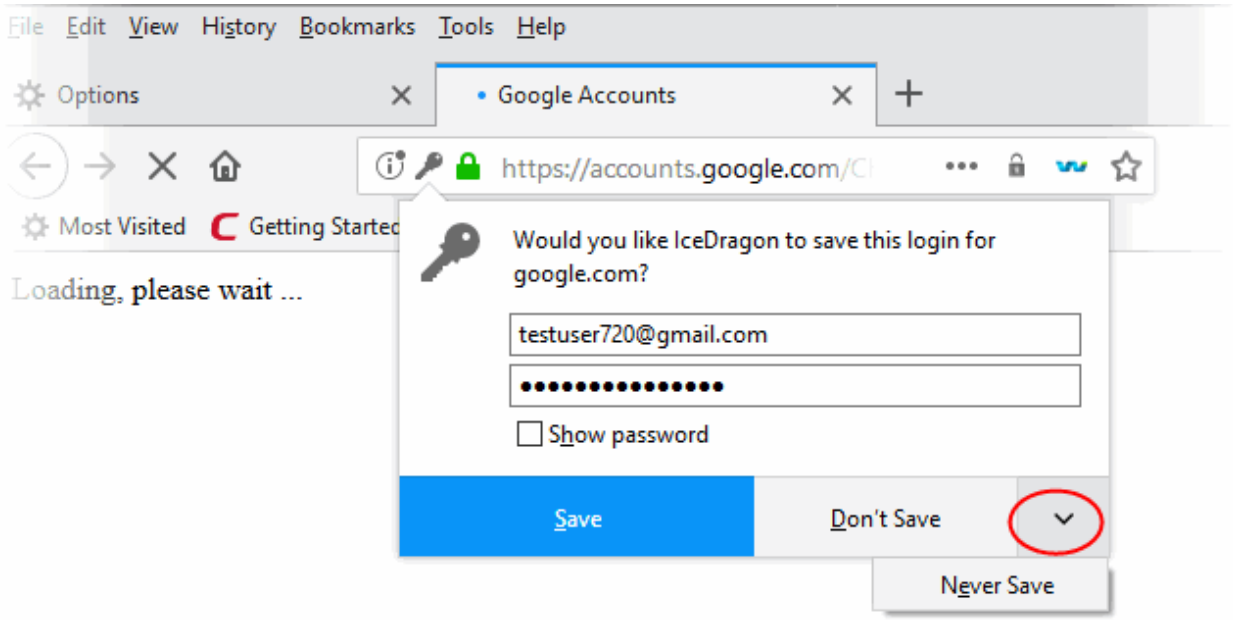
The following links provide more help on:

- **The 'Remember Password' prompt**
- **Configure the 'Remember Password' option**
- **Configure Exceptions**
- **View and manage stored passwords**
- **Use a master password**

The 'Remember Password' prompt

When you enter your username and password in a log-in form, IceDragon will offer to remember your password.

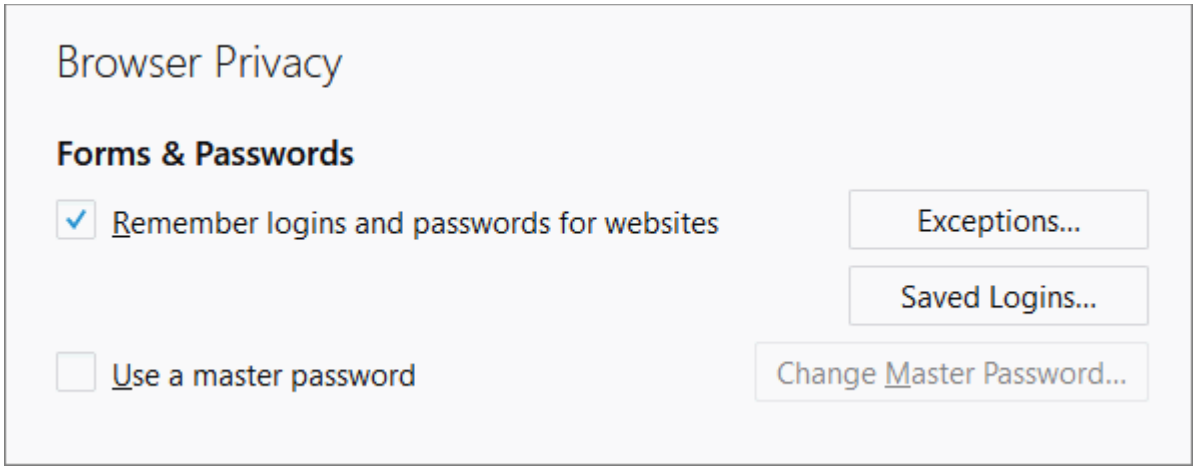
- For the browser to save your password, select 'Remember'
- For additional options click the drop-down arrow beside 'Remember'



- **Don't Save** – Select this option if you don't want to save the password right now, but want to be asked again the next time you visit.
- **Never Save** – Select this option if you do not want to save the password for the site. The password you entered will not be saved and the site will be added to the exception list (see below). IceDragon will not offer to save your password the next time you visit the site.

Configure 'Remember Password' options

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > "Privacy and Security' > 'Browser Privacy'.
- 'Remember logins and passwords for websites' - Disable if you do not want IceDragon to auto-fill logins and passwords.
  - Exceptions - Add websites for which IceDragon should not remember your username and password.
  - Saved logins - A list of all the websites for which IceDragon has saved the username/password. You can remove or import sites as required.
- Use a master password – If enabled, IceDragon will require you enter a password **before** it will auto-complete your username and password on a login page.



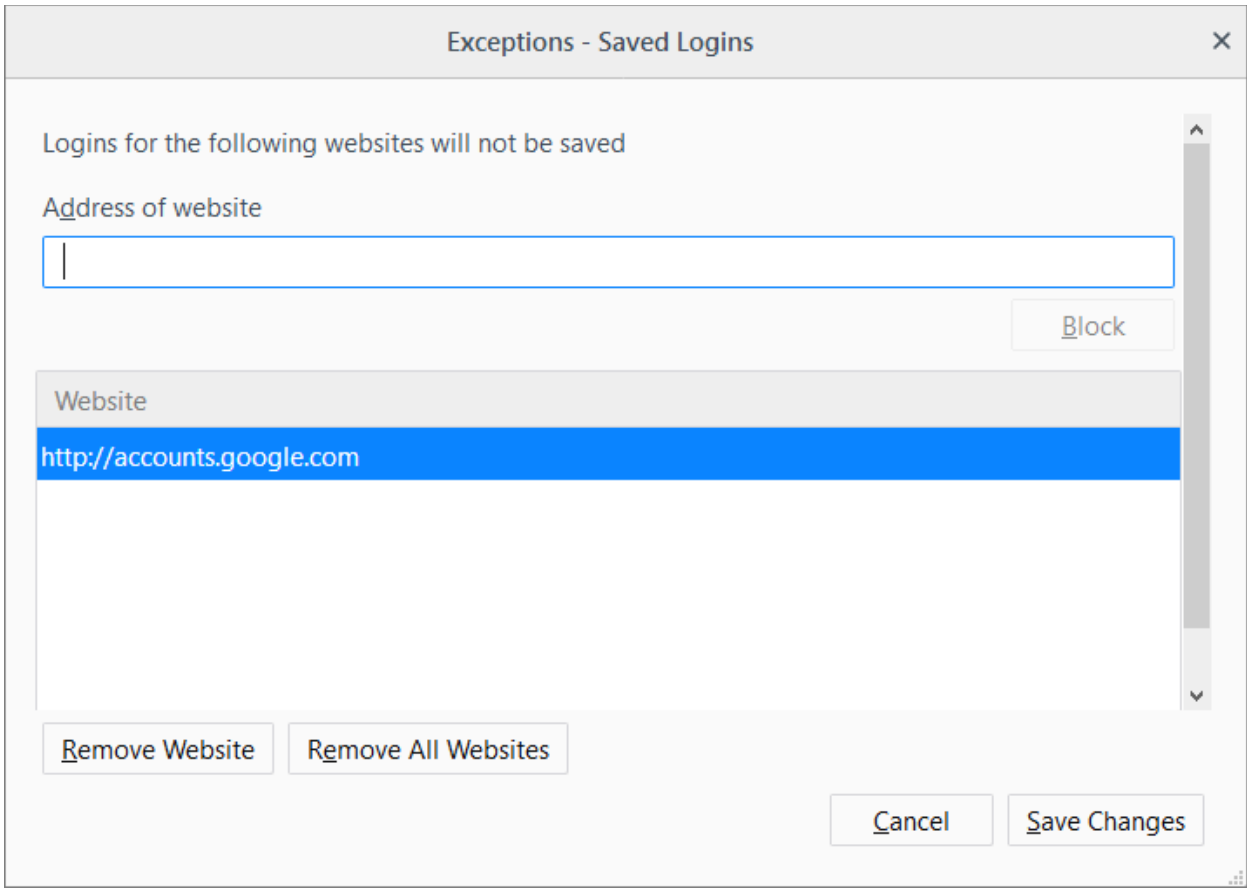
Configure Exceptions

- Websites for which you chose 'Never Remember Password' at the **prompt** are added to exclusions.
- The passwords for these sites will not be saved and the 'Remember Password' prompt will not appear after logging in to these sites in future.
- You can view and remove sites from the exclusion list as follows:

To view exception logins

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > 'Privacy and Security' > Browser Privacy'
- Click 'Exceptions' beside 'Remember logins and passwords for websites'

The 'Exceptions - Saved Logins' dialog will open:

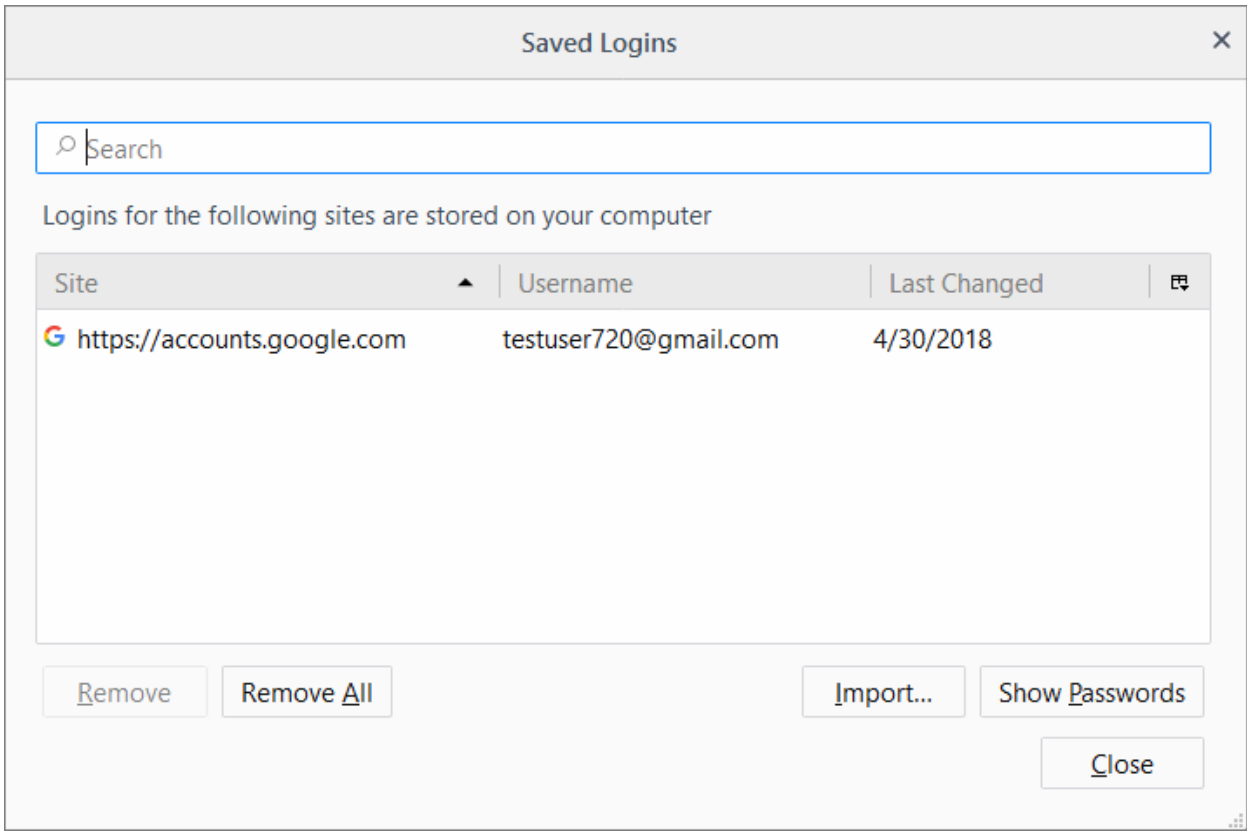


- To remove a site from exceptions, select the site and click 'Remove Website'.
- To remove all sites from exceptions, click 'Remove All Websites'.

View and Manage Stored Passwords

- Click the hamburger/ 'Open Menu' at the top-right then select 'Options' > "Privacy and Security' > Browser Privacy'
- Click 'Saved Logins' under the 'Forms & Passwords'

The 'Saved Logins' interface shows list of sites that have stored passwords associated with them. You can search the list for a specific username or website by entering it fully or partially in the search bar.



- To delete a stored password, select the website and click 'Remove'.
- To delete all stored passwords, click 'Remove All'.
- To import your login from another browser, click 'Import'.
- To view a password saved for the site, click 'Show Password' and enter the master password in the dialog.
- Click 'Hide Passwords' to conceal the password.
- Click 'Close' to exit the 'Saved Logins' interface.

Set a master password

- If you have asked IceDragon to remember your usernames and passwords, then they will be automatically entered whenever you visit the site.
- While this is convenient, it can be a security risk if someone else uses your computer. They could visit the login page of one of your websites then automatically gain access to your account.

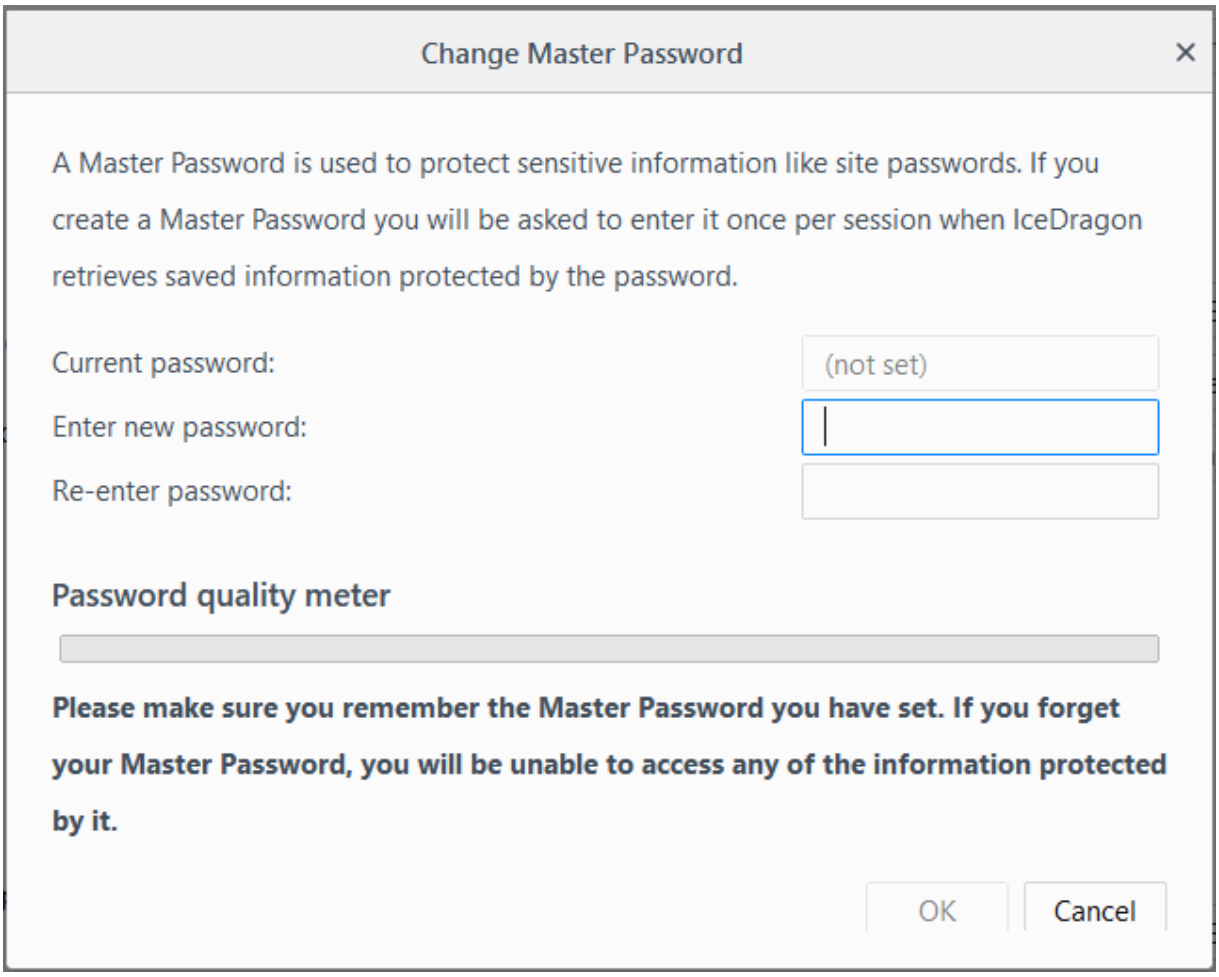
  The master password feature overcomes this by requiring you enter a password before IceDragon will auto-populate your login credentials.

Important: Do not forget your master password. If you do, you will not be able to access your saved passwords.

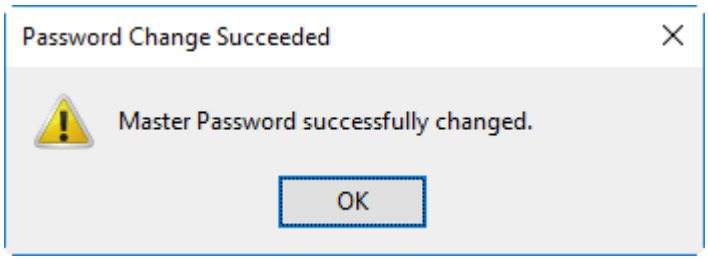
To specify a master password

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > "Privacy and Security' > Browser Privacy'
- Check the 'User a master password' box.

The 'Change Master Password' dialog will open:



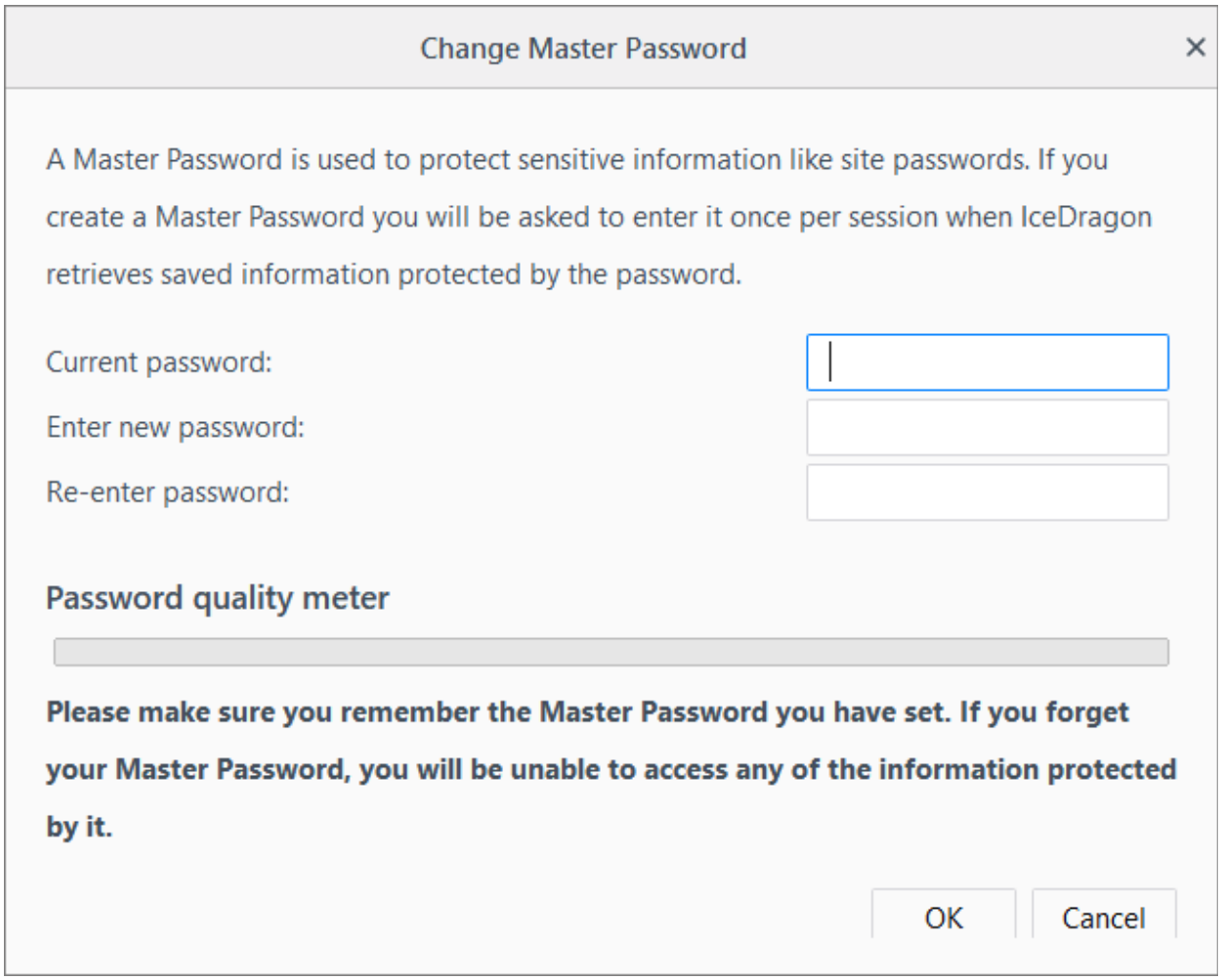
- Enter a password to authenticate in the 'New password' box and then repeat it. Click 'OK'



- Click 'OK' for the settings to tale effect.
- You can change your master password as frequently as you would like to ensure that it remains secret.

Change the master password

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Options' > "Privacy and Security' > Browser Privacy' > Forms and Passwords'
- Click 'Change Master Password':



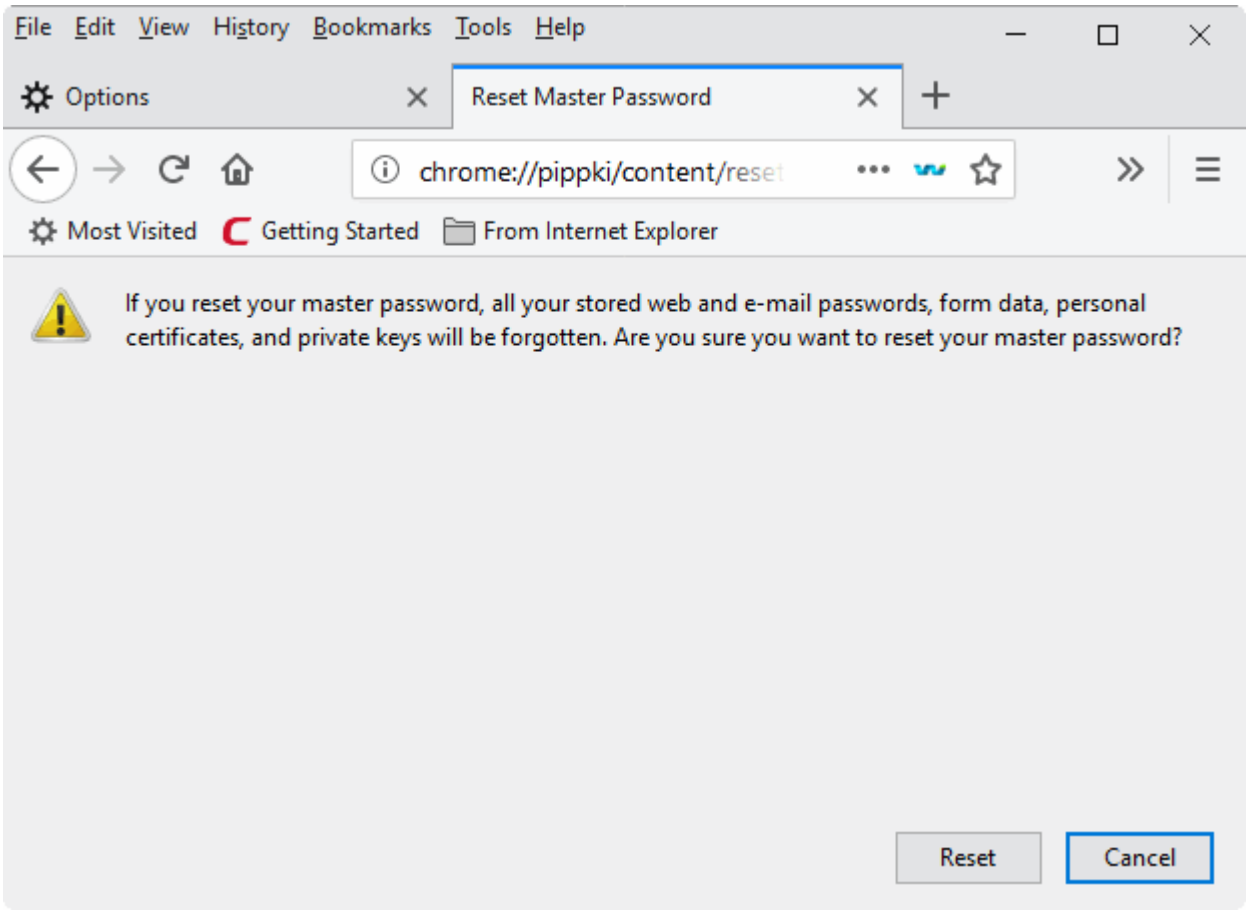
- Type your current password, then enter your new password and re-enter it in the 'Re-enter password' field.
- Click 'OK' in the confirmation dialog.
- Click 'OK' for the settings to rake effect.

In order to change your forgotten master password, reset it .

Warning note: All your saved usernames and passwords will be removed after resetting your master password.

In the 'Location' bar, enter the following,

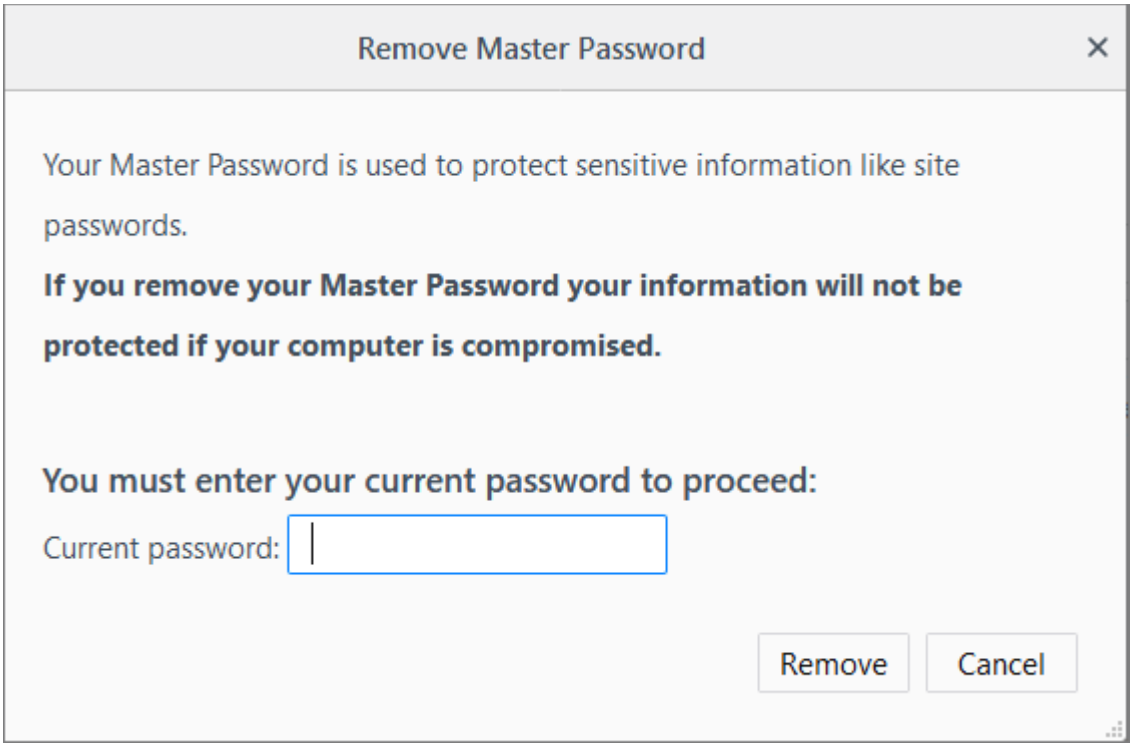
```
chrome://pippki/content/resetpassword.xul
```



- Click 'Reset'.

To remove the master password

- Click the hamburger/ 'Open Menu' at the top-right corner
- Select 'Options' > 'Privacy and Security' > 'Browser Privacy'
- Uncheck 'User a master password' box under the 'Forms and Passwords'



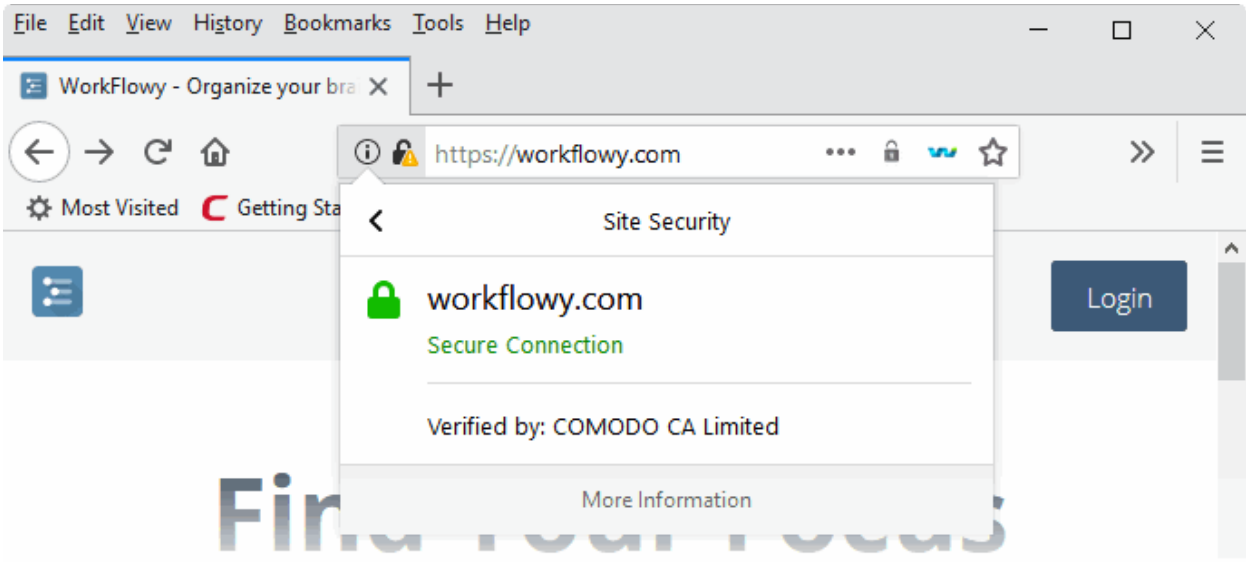
- Type you current password in the The 'Remove Master Password'
- Click 'Remove'
- In the warm dialog, click 'OK' to confirm your removal.

7.11. SSL Certificates and Secure Connections

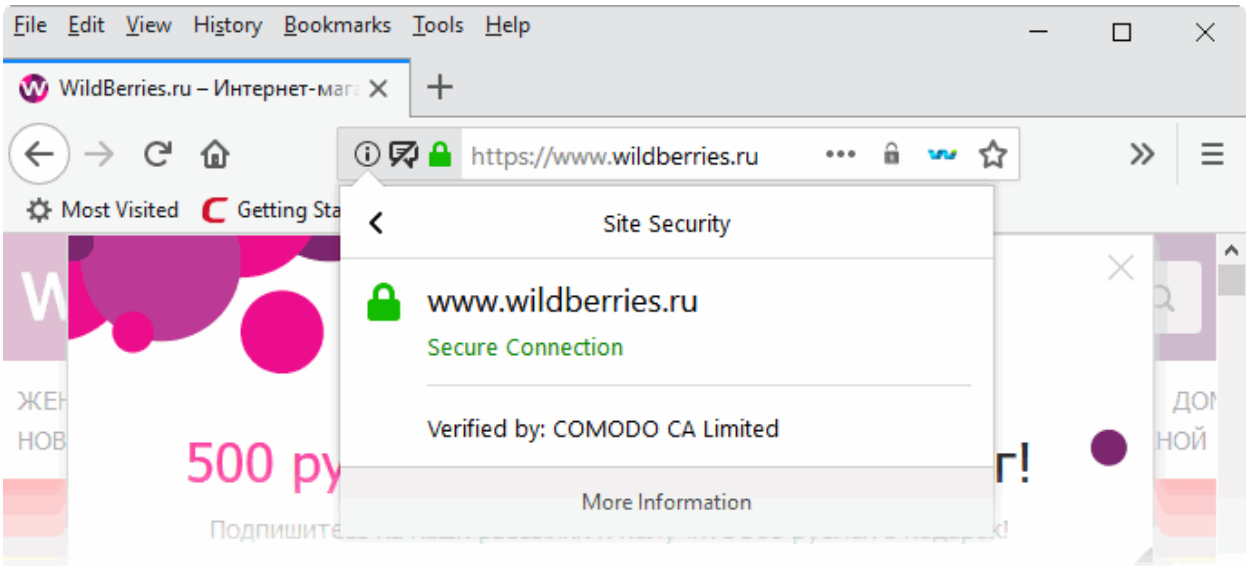
- Whenever you make a secure connection to a website, the beginning of the URL will change from HTTP to HTTPS (with the 'S' standing for secure).
- A padlock will also appear at the left of the address. This indicates that the page is using a TLS/SSL certificate to encrypt all communications between you and the site.
- However, not every type of certificate should be trusted to the same degree.

There are three main types of certificate – Domain Validated (DV), Organization Validated (OV) and Extended Validation (EV).

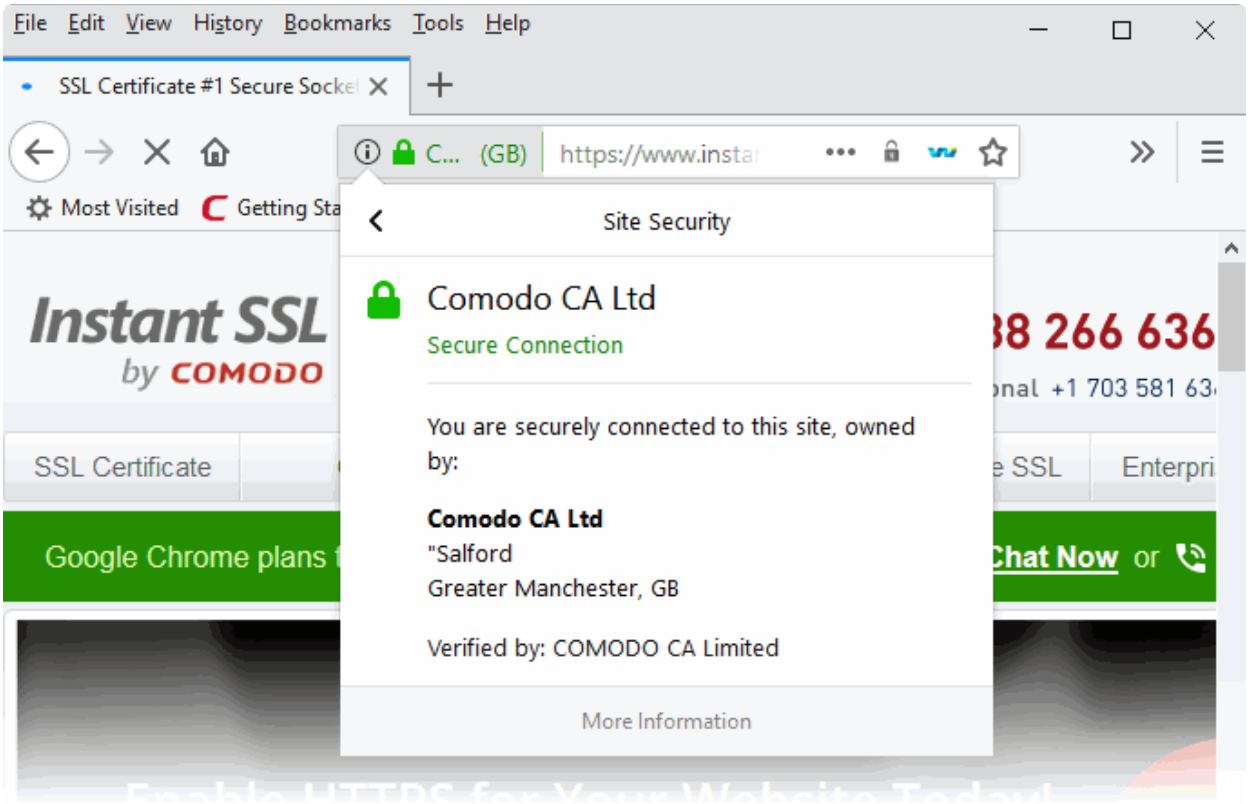
Domain Validated (DV) – These certificates are the lowest cost means of securing a website but do not provide authentication or validation of the business behind the website. DV certs are issued after the applicant has proven they control the domain for which the certificate is intended. Applicants can validate domain control using fast, online methods, such as responding to a challenge-response email. EV and OV similarly require domain control validation, but also require the applicant to supply business documentation to confirm their identity.



Organization Validation (OV) – These certificates include full business and company validation from a certificate authority using currently established and accepted manual vetting processes. Because of this requirement, these certificates provide significantly higher levels of trust and security than DV SSL certificates but are not validated to the stringent standards set by the CA/B forum and do not possess the ability to turn the address bar green in the latest browsers.



Extended Validation (EV) – EV certificates are validated to the strong guidelines set by the CA/B Forum, an independent standards body consisting of major browser providers and certificate authorities. EV certificates are only issued after in-depth background checks have been carried out on the applicant company. Because of this, EV certificates provide the highest levels of security and trust to end-users. To reflect this higher level of trust, IceDragon shows a green indicator if a site has an EV certificate. The indicator contains the name and address of the company that owns the website, and the name of the CA who issued the certificate.



Trust between the person using the browser the website they are connected to is only possible when two stages of validation are completed.

1. Verification that the certificate applicant owns the domain name of the website.
2. Verification that the certificate applicant is a legitimate and legally accountable business.

Step 2) is carried out by a Certificate Authority (CA) such as Comodo or Symantec. A CA employs human operatives to carry out strict vetting of the applicant's business and legal standing. Only once this layer of company validation has been completed can a website be truly 'trusted'.

Users can tell an EV certificate because the name of the company that owns the site is shown in green text next to the URL. You can also click the lock to view complete details. The following screenshot shows the certificate on instantssl.com, which is operated by Comodo.

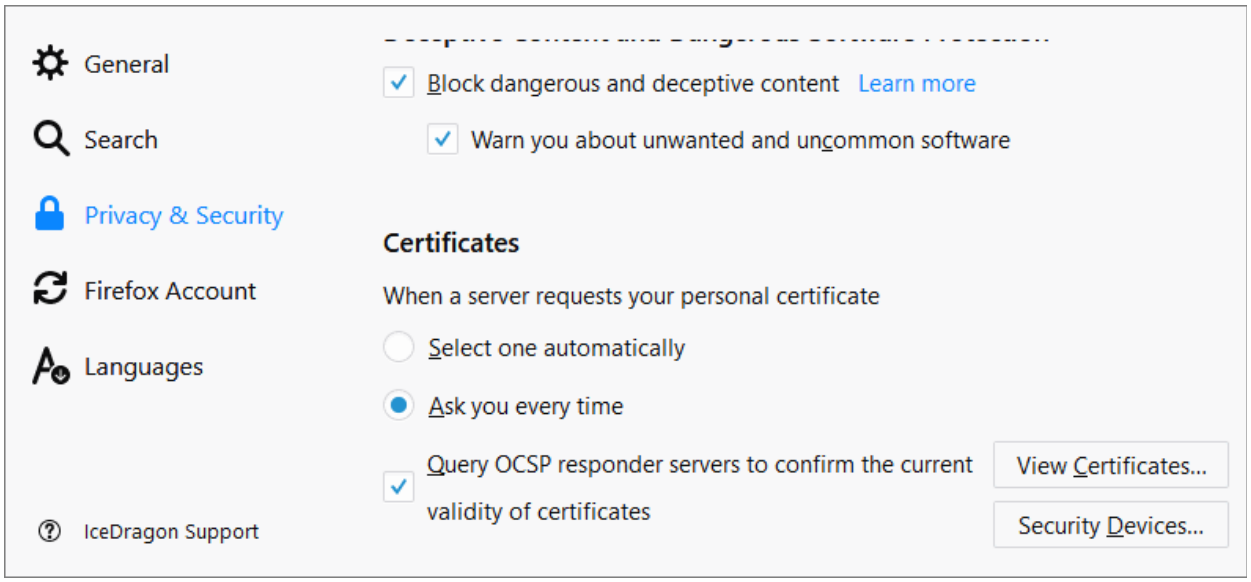
7.12. Manage SSL Certificates and HTTPS Security

- Comodo IceDragon uses TLS/SSL certificates to encrypt data in transit between the browser and the website you are connected to.
  - For example, when you make a purchase online, the order form will be secured with a website SSL certificate. You can tell when you are on an encrypted connection because the website address will begin with https:// rather than http:// (with the 's' standing for secure).
- Other indicators include a padlock in the address bar and, in the case of Extended Validation certificates, the address bar itself will change color to green. The lock indicates that confidential information such as credit card details are securely encrypted and cannot be intercepted en-route by a thief.
- Website SSL certificates also contain authentication information about the website owners, including the company name and physical address. This allows you to verify that the website you are connected to is owned and operated by a legitimate company. Please visit **http://www.instantssl.com** for more details.
- Personal, client and email certificates are used to authenticate people, encrypt communications and digitally sign documents. For more details, please visit **https://www.instantssl.com/ssl-certificate-**

products/personal-authentication-certificate.html

To manage personal and website certificates

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > 'Privacy and Security' > 'Security'
- Select the 'Certificates' tab



Websites usually request a personal certificate as part of a two-factor authentication scheme. The website requires you to enter your username/password as usual, plus present your personal certificate.

- If you want IceDragon to select one automatically from its certificate store, choose 'Select one automatically'.
- If you want to manually select the certificate yourself when a website asks for a personal certificate, select 'Ask me every time'
- 'Query OCSP responder servers...' - If enabled, Ice Dragon will run an Online Certificate Status Protocol (OCSP) check of every SSL certificate it encounters. OCSP checks establish whether or not the certificate has been revoked or not.

The 'Certificates' configuration settings enables you to:

- **View and manage certificates**
- **Configure security modules that store certificates and passwords**

View and manage certificates

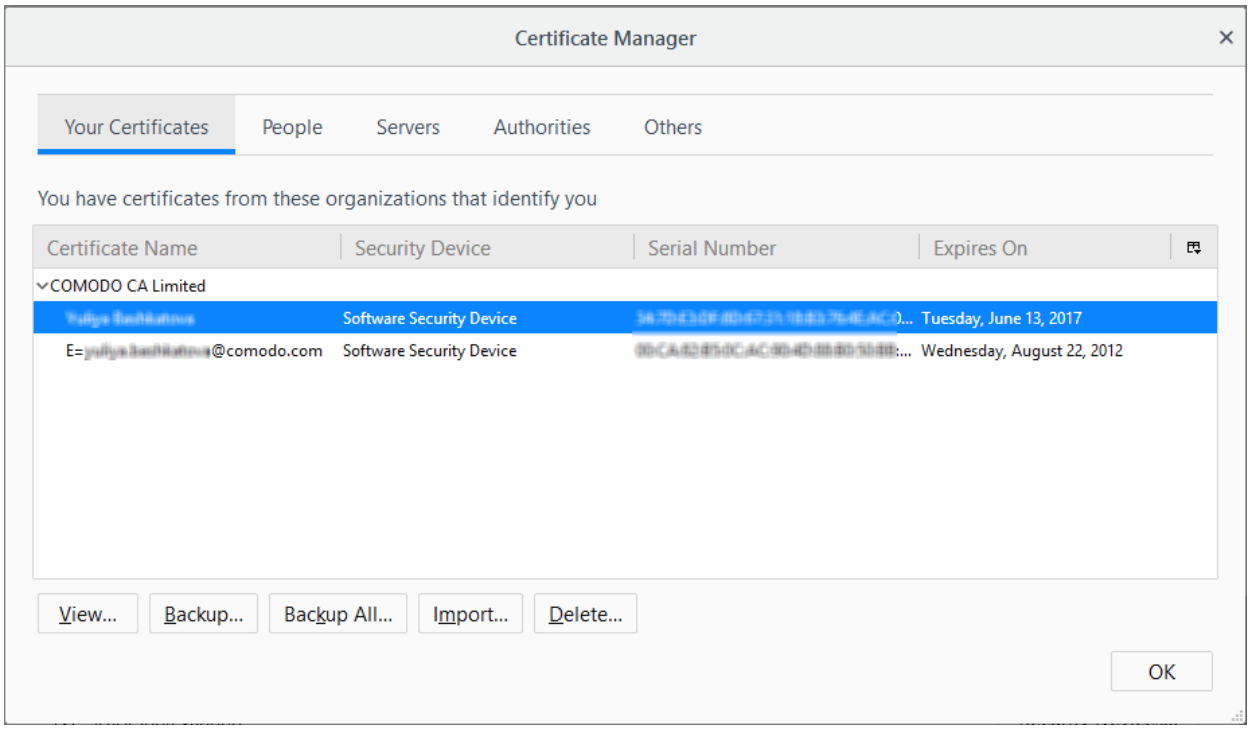
- Click 'View Certificates' under 'Certificates'.

The 'Certificates Manager' window will be opened. The 'Certificates Manager' has the following tabs:

- **Your Certificates**
- **People**
- **Servers**
- **Authorities**
- **Others**

Your Certificates

The 'Your Certificates' area lists your personal/client/secure-email certificates.



The dialog enables you to:

- **Import your certificate from your local storage to your browser**
- **View the certificate details**
- **Backup your certificate(s)**
- **Delete expired or revoked certificates**

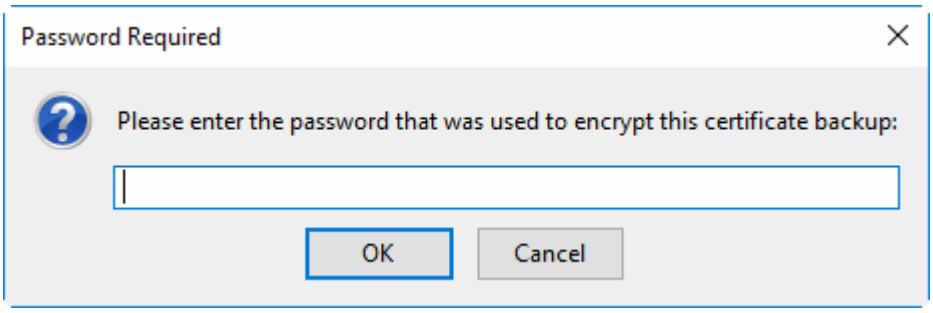
Import your certificate

You might have stored your personal authentication, client or secure-email certificate downloaded from a Certification Authority (CA) or the one provided by your Network Administrator in your computer. You can import and install the certificate into your browser through the 'Certificate Manager'.

To import your certificate

- Click 'Import' from the 'Certificate Manager' > 'Your Certificates' interface
- Browse to the location where you stored your certificate and click 'Open'

You will be prompted for entering the password you entered while storing the certificate in your computer.



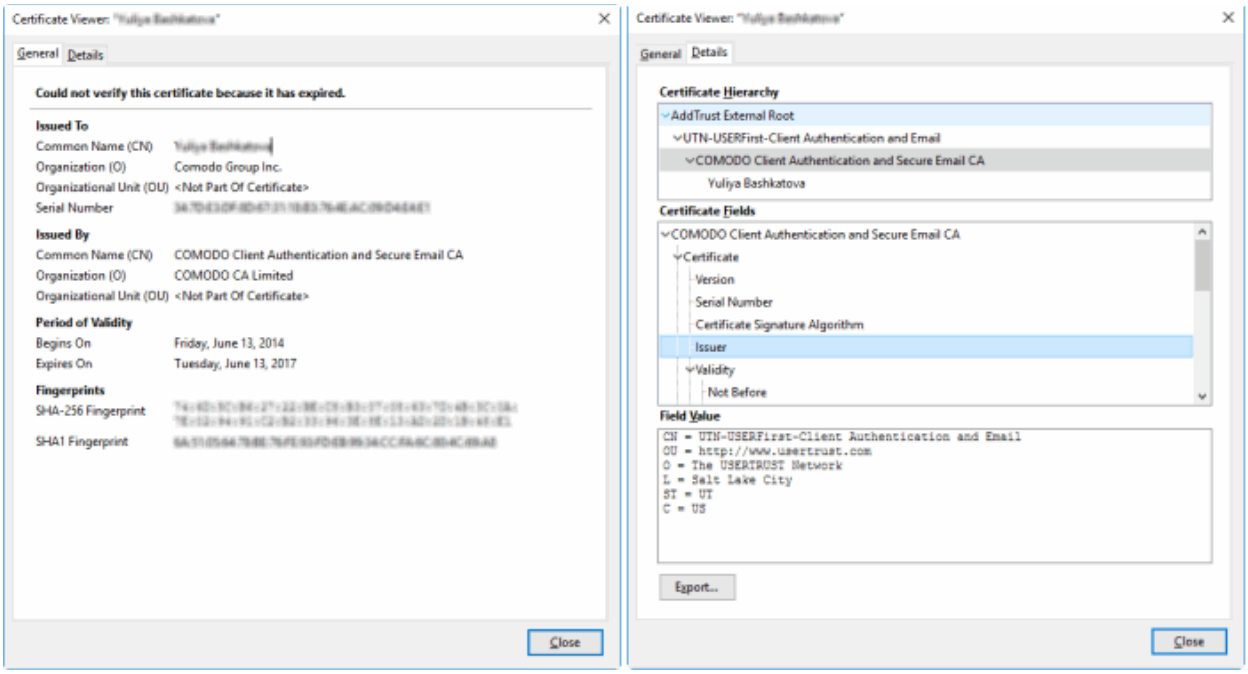
- Enter the password that was used while storing the certificate and click 'OK'

Your certificate will be imported to the certificate store of the browser.

View Certificate Details

- To view the certificate, select the certificate and click 'View'.

The general information and detailed information on the certificate will be shown under the respective tabs in 'Certificate Viewer' dialog.



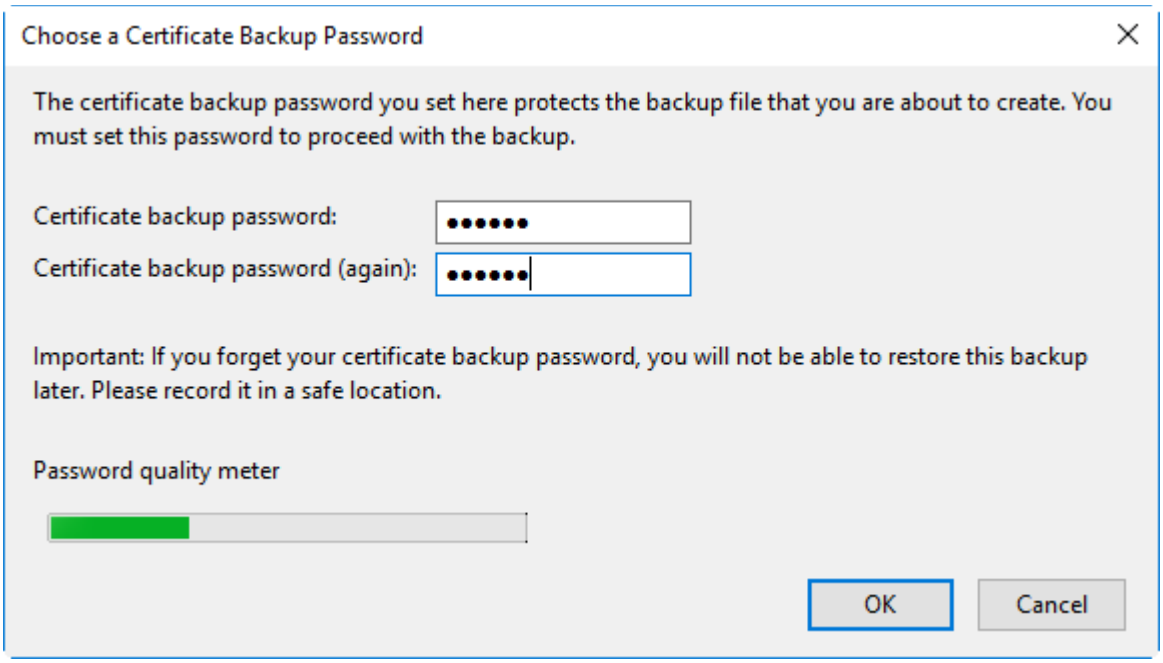
Store a Backup of a certificate

You can store a backup of your certificate(s) for safe-keeping. The backup enables you to re-install them if you have to uninstall and re-install the browser.

To backup a certificate

- Select the certificate and click 'Backup...'
- Navigate to a safe location in your local computer or your network and enter a file name
- Click 'Save'

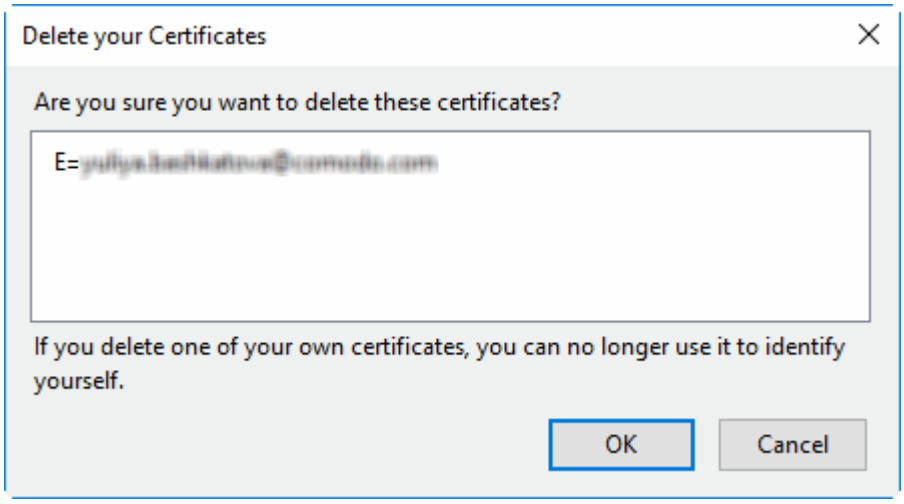
You will be prompted to enter a password for the backup. Your certificate will be stored in the backup in an encrypted form with this password. In order to restore your certificate, you need to enter this password.



- Type a password and re-enter it for confirmation in respective fields. Choose the password as a mixture of alphanumeric characters, upper and lower case letters and special characters. The password quality meter shows the strength of the password you have chosen.
- Click 'OK'.
- To backup all you certificates at once, click 'Backup All...' and follow the same procedure.

Delete a certificate

- Select the certificate to be deleted and click 'Delete'.

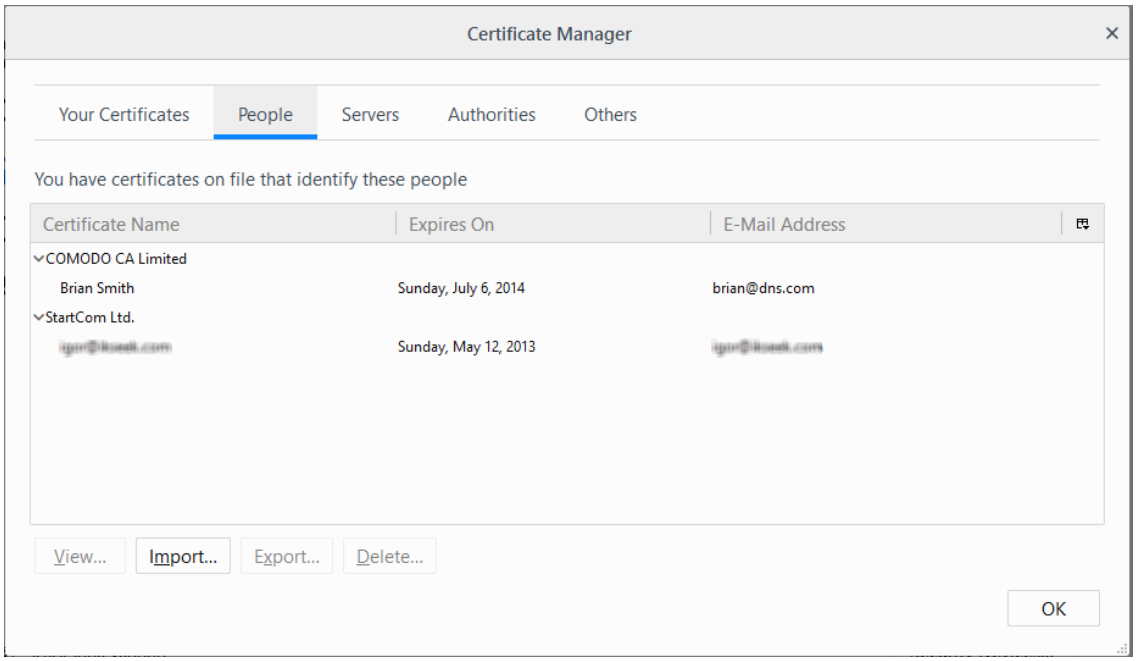


- Click 'OK' in the confirmation dialog.

Note: If you delete your currently active certificate, you will not be able to use it for identifying yourself to the websites that require it.

People

The 'People' tab lists other people's client and email certificates. You usually obtain these by receiving a signed email from the person in question. These certificates are necessary if you want to encrypt messages/email you send to the contact. Likewise, they will need your certificate to encrypt messages they send to you.



The dialog enables you to:

- **View the certificate details**
- **Import other person's certificate from your local storage to your browser**
- **Export a certificate**
- **Delete expired or revoked certificates**

View the Certificate

- To view the certificate, select the certificate and click 'View'.

The general information and detailed information on the certificate will be shown under respective tabs in 'Certificate Viewer' dialog similar to that of your certificate. Please see **View the Details** of the 'Certificate' in the previous section.

Import other person's certificate to your browser

In addition to other people's certificate's certificates automatically stored in your browser, you can manually import some people's certificates with whom you may communicate through encrypted channel. For example, you can export your contact's certificate to your local storage and import into IceDragon browser.

The procedure is same as importing your own certificate. Please see **Import your certificate** in the previous section.

Export Other People's Certificates

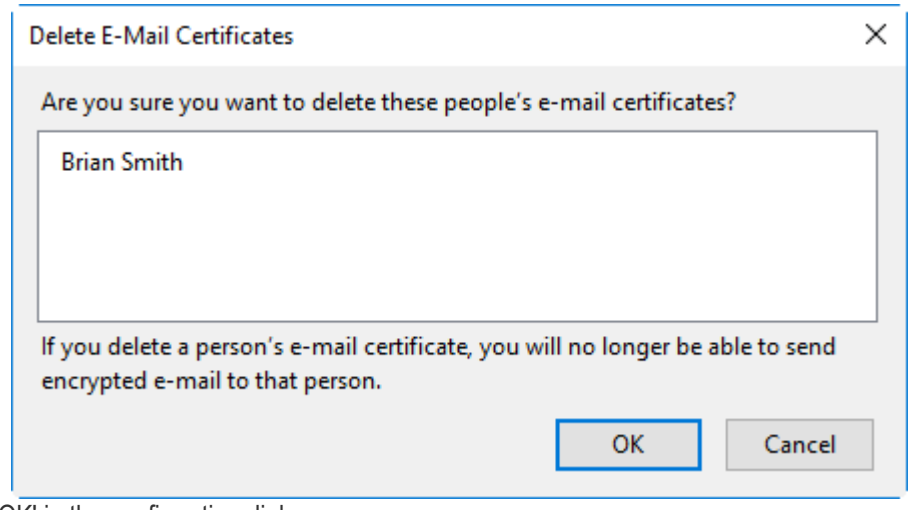
You can export other people's certificate from IceDragon to a safe place, for safe keeping and for importing from other browsers or email clients.

To export a certificate

- Select the certificate
- Click 'Export' and navigate to a safe location in your computer or your network.
- Click 'Save'

Remove a Certificate

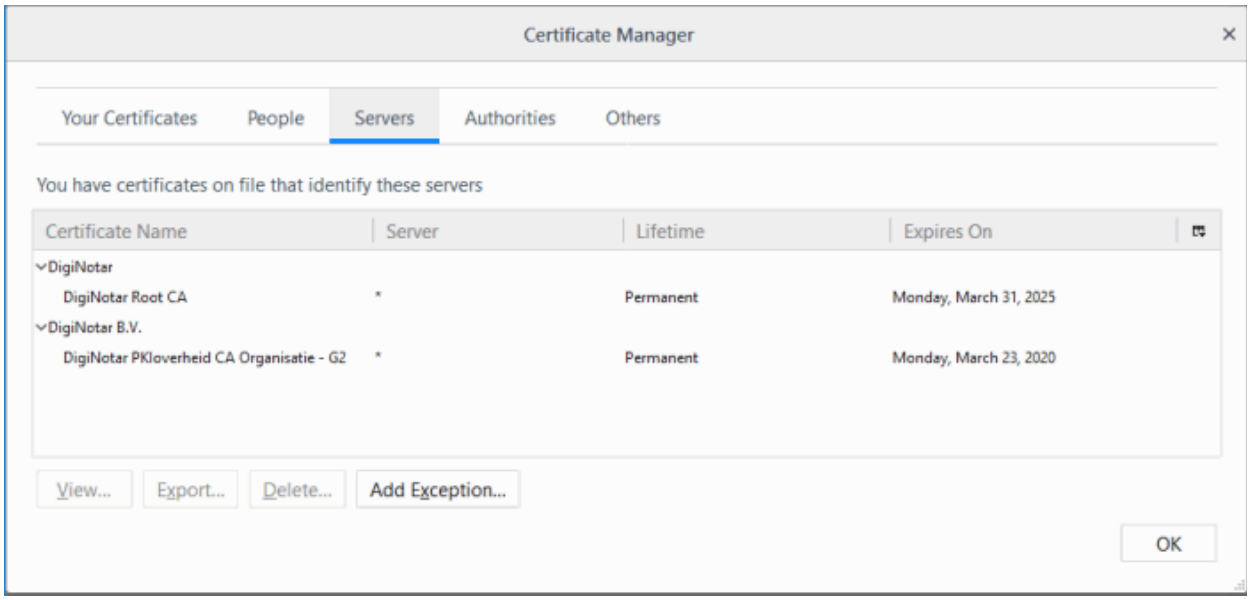
- Select the certificate and click 'Delete'.



- Click 'OK' in the confirmation dialog.

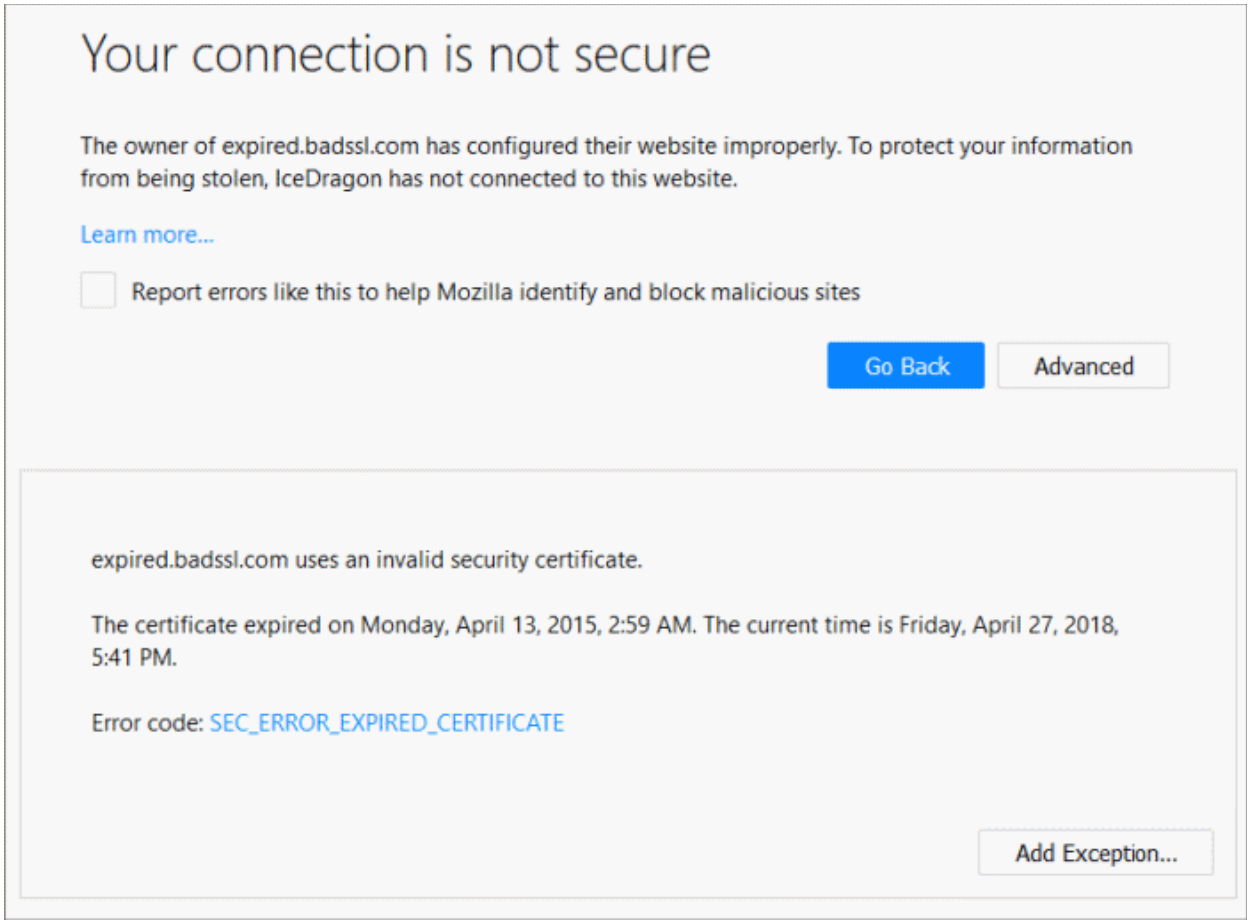
Server Certificates

The 'Server Certificates' tab lists root certificates that are pre-embedded in IceDragon or have been imported by the user.



This interface allows you to:

- **View the certificate details** – The procedure is similar to view your own certificates. Please see **View the Details of the Certificate** for more details.
- **Export Server Certificates** - Export and save server certificate in a safe location for future use, example, for importing to other browsers or email clients. The procedure is similar to exporting other people's certificates. Please see '**Export other people's certificates**' for more details.
- **Import Certificates from local storage** – Import server certificates stored locally in your system or in your network into the browser. The procedure is similar to importing your own certificates. Please see '**Import your certificate** ' for more details.
- **Delete certificates** – Delete expired and unwanted certificates. The procedure is similar to deleting other people's certificates. Please see '**Delete other people's certificates**' for more details.
- **Add Exceptions** – Some of the websites may use a certificate that has not been issued by a trusted CA. If you visit those websites, Comodo Ice Dragon will display a warning:



- If you trust the site, click 'Advanced' > 'Add Exception' and proceed with adding this site as an exception.

The 'Add Exceptions' interface allows you to add such trusted websites in advance, to be exempted from the security check.

- Click 'Add Exception' in the 'Servers' tab of the 'Certificate Manager' dialog to add a website manually.
- Type the url of the site to be exempted from the security check and click 'Get Certificate'.

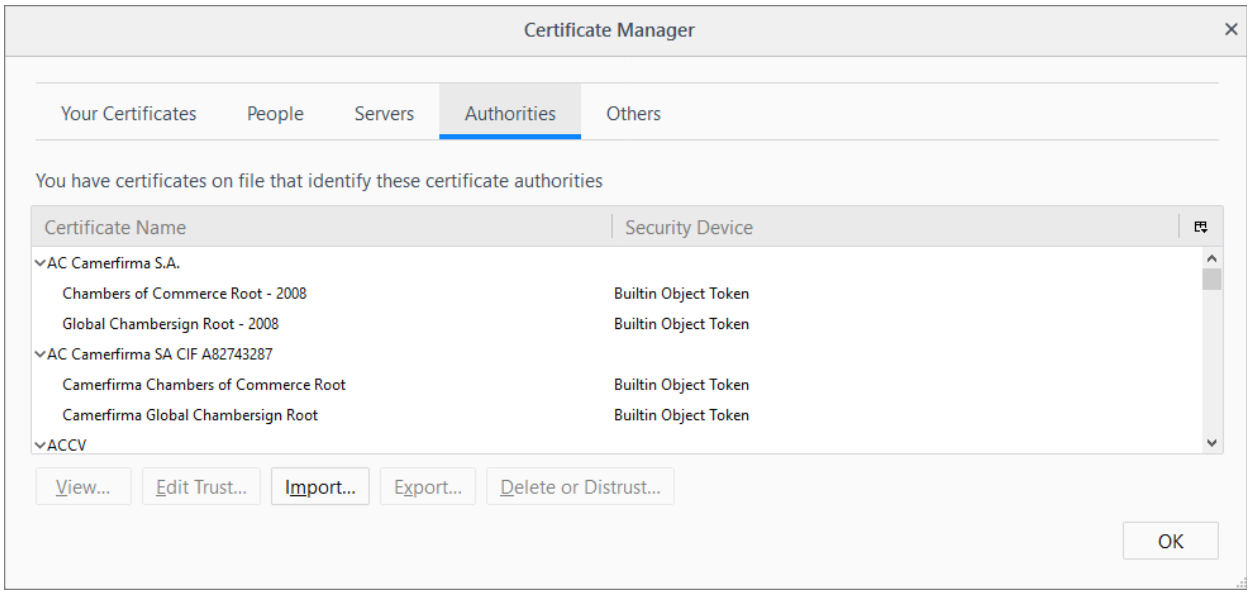
The browser fetches the certificate, checks for its legitimacy and displays its status.

- If you trust the site, click 'Confirm Security Exception'.

The website will be added to the exceptions and transactions through it will be allowed by the website even if the certificate is not trusted.

Authorities

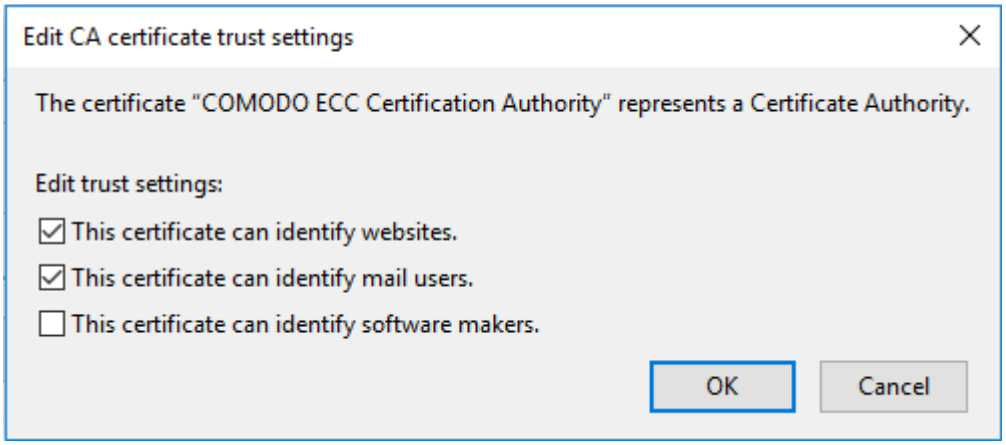
The 'Authorities' tab displays the root certificates of trusted CAs that are pre-embedded in Comodo IceDragon.



This interface allows you to:

- **View the certificate details** – The procedure is similar to viewing your own certificates. Please see **View the Details of the Certificate** for more details
- **Configure Trust Settings** – Configures the level up to which the other authorities' certificate and its issuer can be trusted.
  - Select the certificate and click 'Edit Trust' in the 'Authorities' tab

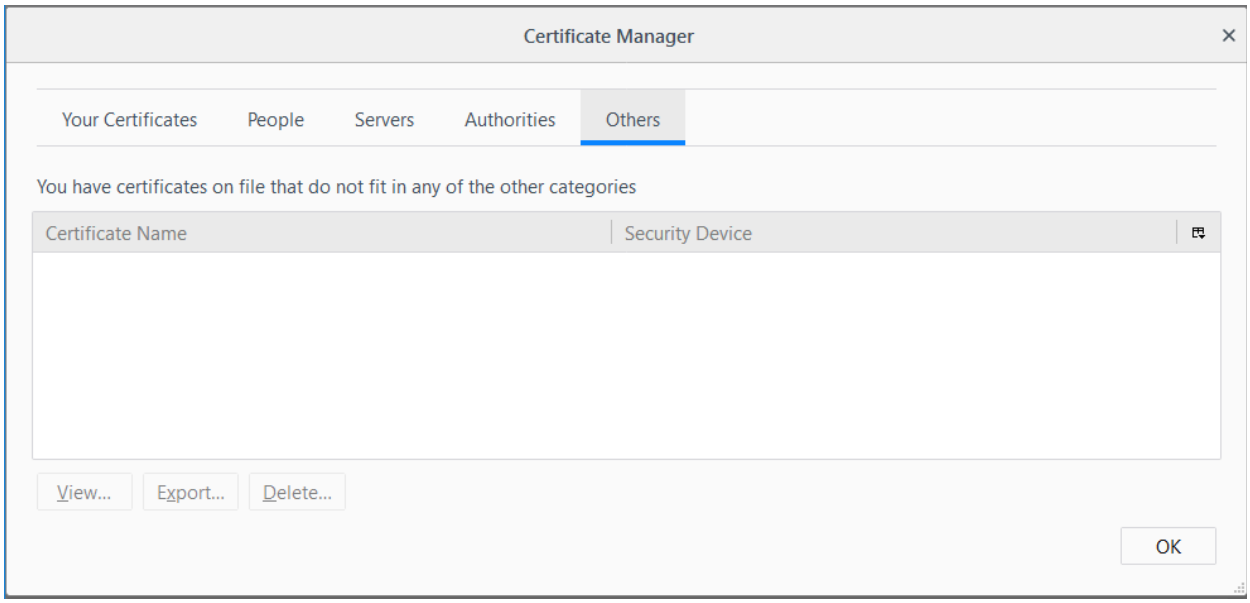
  The 'Edit CA certificate settings' dialog configures Trust Settings on the CA that has issued this certificate.



  - Select the entities that can be authenticated by this CA and click 'OK'.
- **Import Certificates from local storage** – Import server certificates stored locally in your system or in your network into the browser. The procedure is similar to importing your own certificates. Please see '**Import your certificate**' for more details.
- **Export Server Certificates** – Export and save server certificate in a safe location for future use, example, for importing to other browsers or email clients. The procedure is similar to exporting other people's certificates. Please see '**Export other people's certificates**' for more details.
- **Delete or Distrust certificates** – Delete expired and unwanted certificates. The procedure is similar to deleting other people's certificates. Please see '**Delete other people's certificates**' for more details.

Others

The 'Others' tab displays certificates that do not fall under any of the other categories. You can View, Export and Delete certificates from this interface.



Configure Security Modules that store Certificates and Passwords

Comodo IceDragon contains built-in security modules to store your passwords and certificates securely. In addition for enhanced security, you can use external security devices like smart cards to store your certificates and passwords, and configure IceDragon to fetch your certificates and passwords from them.

Security modules

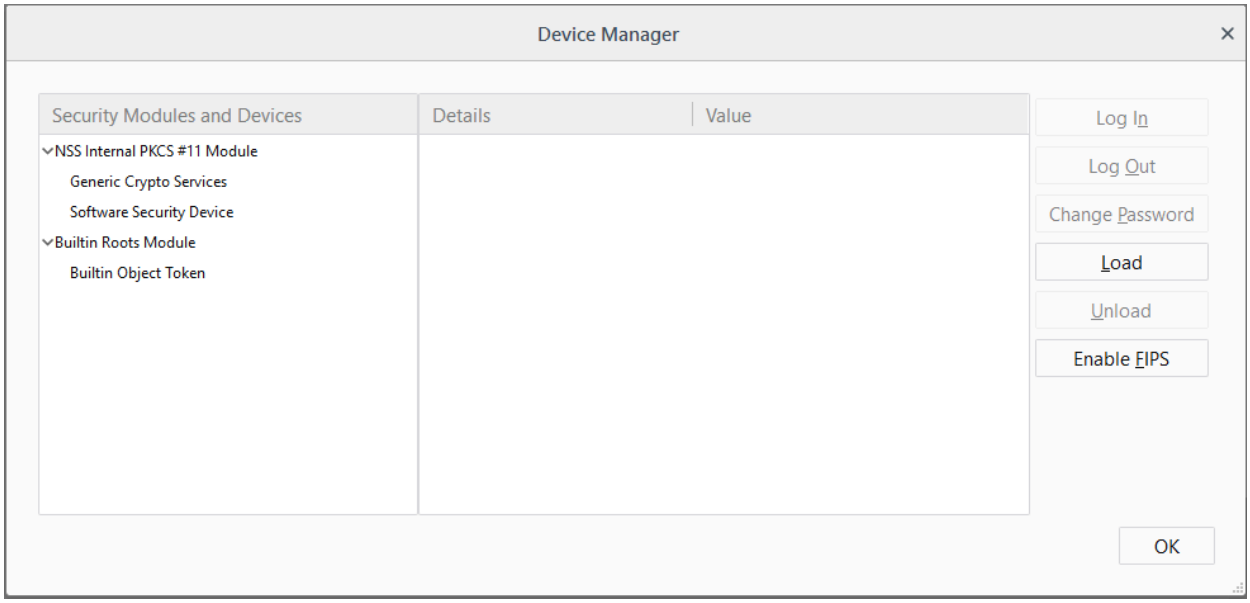
A Security Module or a PKCS#11 module is a program to manage encryption and decryption using the PKCS #11 standard. A PKCS #11 module can control a software security devices as well as hardware security devices like a smart card or token, in a reader inserted into a slot dedicated for the module

By default, Comodo IceDragon has two internal PKCS#11 security modules.

- **NSS Internal PKCS #11 Module** that controls two types of security devices:
  - **Generic Crypto Services** - A special software security device for all cryptographic operations required by the Netscape Internal PKCS #11 Module.
  - **Software Security Device** - A software security device for storing your certificates and passwords that cannot be stored on external security devices, including any CA certificates that you have installed in addition to default CA certificates that came with the browser.
- **Built-in Roots Module** controls a special security device called the Built-in Object Token.
  - **Built-in Object Token** - A token that stores the default CA certificates that came with the browser.

Manage Security Modules

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > 'Privacy and Security' > 'Security'
- Click 'Certificates' then 'Security Devices' button

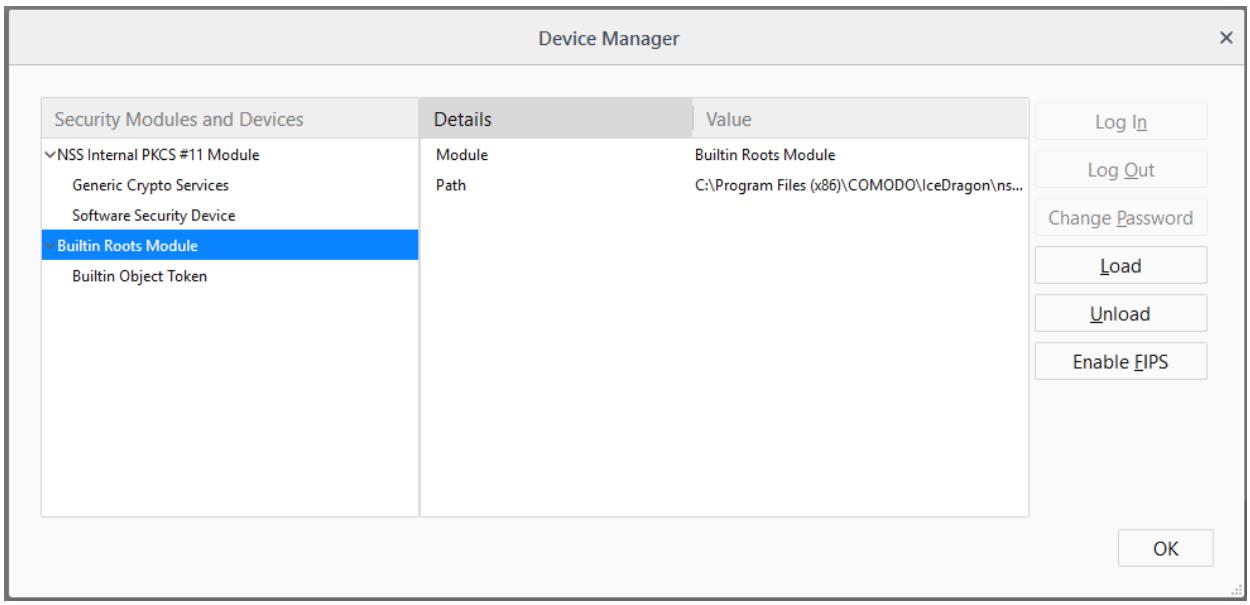


This dialog enables you to:

- **View the details of existing security modules**
- **Log-in to a security device for using cryptographic services**
- **Change master passwords for the security devices**
- **Add security devices**
- **Enable FIPS Mode**

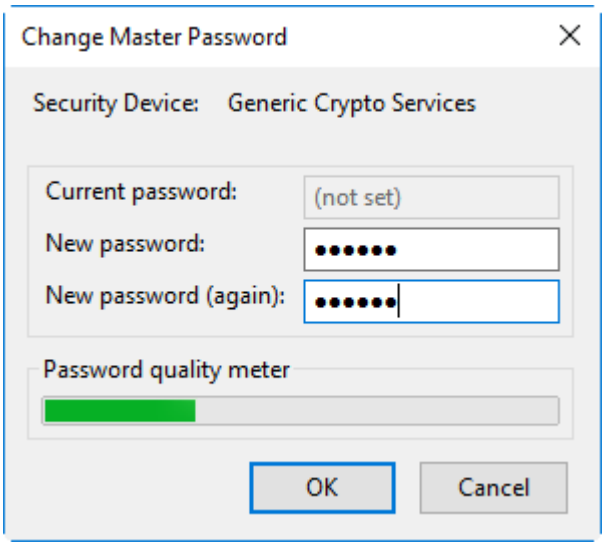
To view details of a security module or a device

- Click on the module or the device
- The details of the module or the device is displayed in the middle pane



Login to a security device

- Select the security device and click 'Log In'
- Enter the Master Password for the security device and click 'OK'



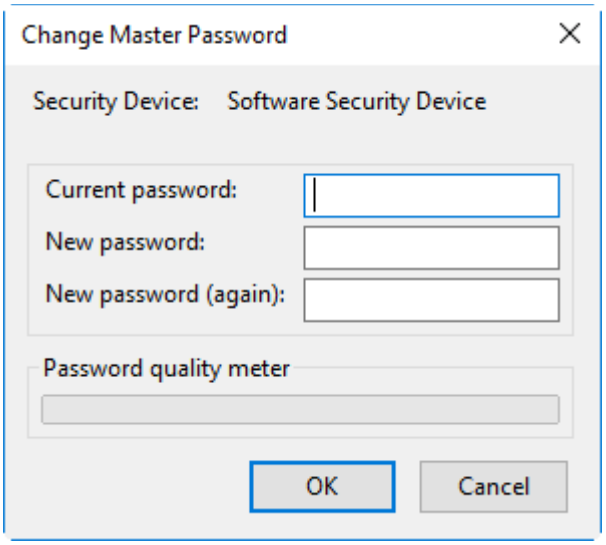
Note: You need to enter the Master Password for the browser to fetch the certificates and passwords. If you haven't set a Master Password please see the instructions on '**To set or change Password**'.

You will be logged-in to the security device so that the browser can access the certificates and the passwords stored by the security device.

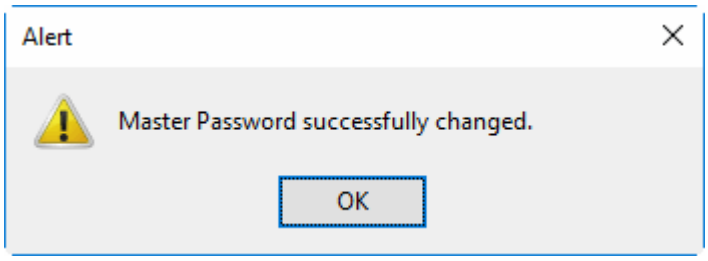
- To logout of the security device, click 'Log Out'

To set or change master password

- Select the security device and click 'Change Password'



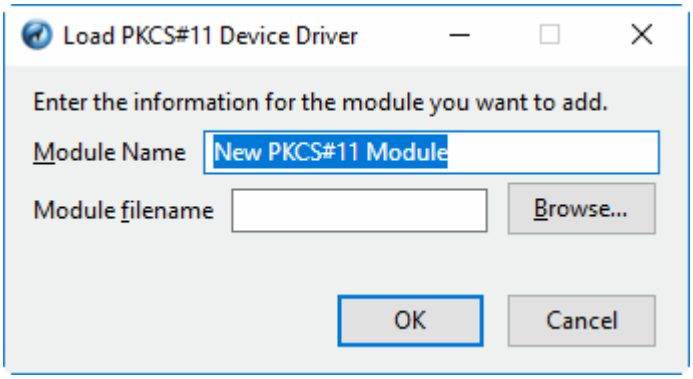
- Enter your current password in the 'Current password' field. If you are setting the 'Master Password' for the fist time, leave this field blank
- Enter your new password, re-enter it for confirmation in the respective fields and click 'OK'.



Add a new security device

If you want to use an external security device like a smart card, you need to first install the module software following the instructions that came with the security device. You may have to physically connect the device to the port specified in the instructions during installation. After installation:

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > Privacy and Security' > 'Security'
- Click 'Certificates' then 'Security Devices' button
- Click the 'Load' in the 'Device Manager' interface



- Enter a name for the new device in order fo the browser to identify it in the 'Module Name' field.
- Enter the path of the module file you installed with the device in the 'Module filename' field.
- Alternatively, click 'Browse' and navigate to the location in your hard drive where you have installed the module and click 'Open'
- Click 'OK'.

Your new module will be loaded. You can set a password and login to the device for the browser to access the certificates and passwords stored by the new device.

- To remove a module, select the module and click 'Unload'.

Enable FIPS Mode

Federal Information Processing Standards Publications (FIPS PUBS) 140-1 is a US government standard for implementations of cryptographic modules - hardware or software that encrypts and decrypts data or performs other cryptographic operations (such as creating or verifying digital signatures).

All the encryption and decryption processes of Comodo IceDragon can be configured to adhere to FIPS PUBS 140-1 through the Device Manager interface.

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > Privacy and Security' > 'Security'

- Click the 'Certificates' tab then 'Security Devices'
- Click 'Enable FIPS'

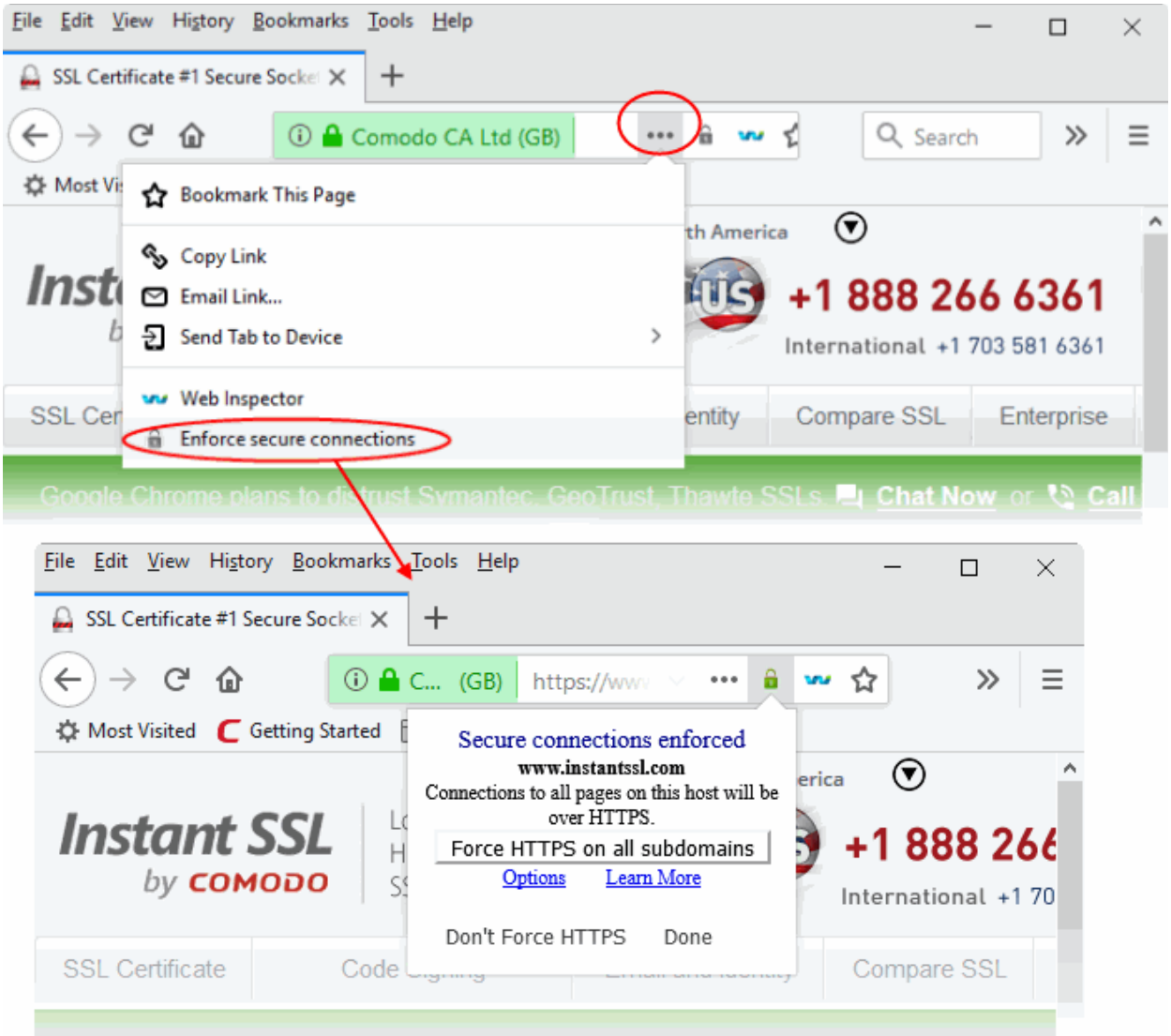
7.13. Force Secure Connections

The 'Force Secure Connections' feature allows you to specify that all future connections to a particular site are made over a secure HTTPS connection. You can also enforce HTTPS connectivity with any sub-domains of the domain.

When you visit a site over HTTPS, Comodo IceDragon will show a padlock icon on the *right* of the address bar.

By default, the padlock is gray, meaning secure connections are not yet enforced. No additional actions will be performed if the page is loaded again.

- Click the ellipsis on the address bar to select the padlock icon to enforce secure connections:

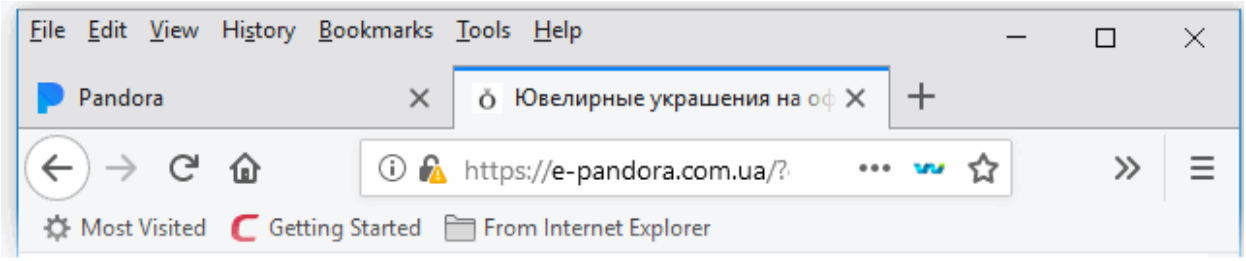


- The address bar padlock will turn green, meaning secure connections are enforced for this session and all future visits
- All information exchanged between you and this website will be encrypted using the strongest available algorithms
- Check 'Force HTTPS on all subdomains' box if you want secure connections throughout the domain

- If you wish to disable forced secure connections, click 'Don't force HTTPS'.

Example usage

This feature is particularly useful for websites that do not, by default, use secure connections on their login pages. For example, the Pandora sign-in page does not ordinarily have HTTPS connections on its log-in page Note: the address is plain HTTP instead of HTTPS - the 'S' stands for secure:

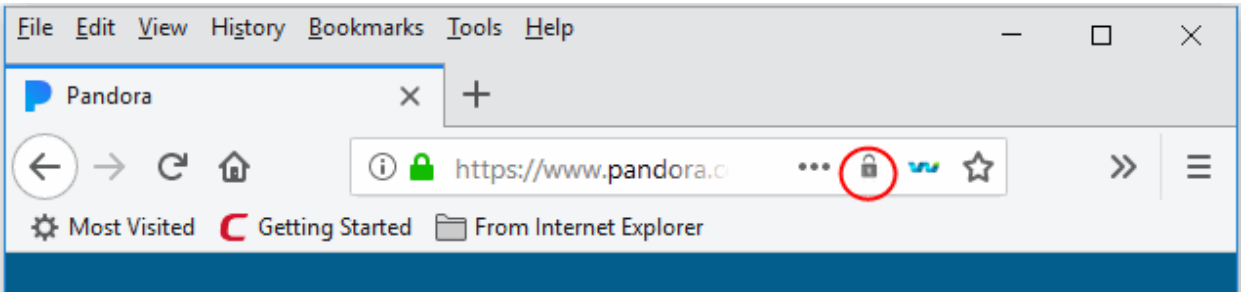


It's possible your credentials may still be posted to HTTPS once you click the 'Sign in' button, but the absence of a certificate on this page means you cannot verify the authenticity of the website. Furthermore, loading the sign-in page over HTTP also means you cannot verify the page's integrity - it may have been modified by a 3rd party before it loaded in your browser.

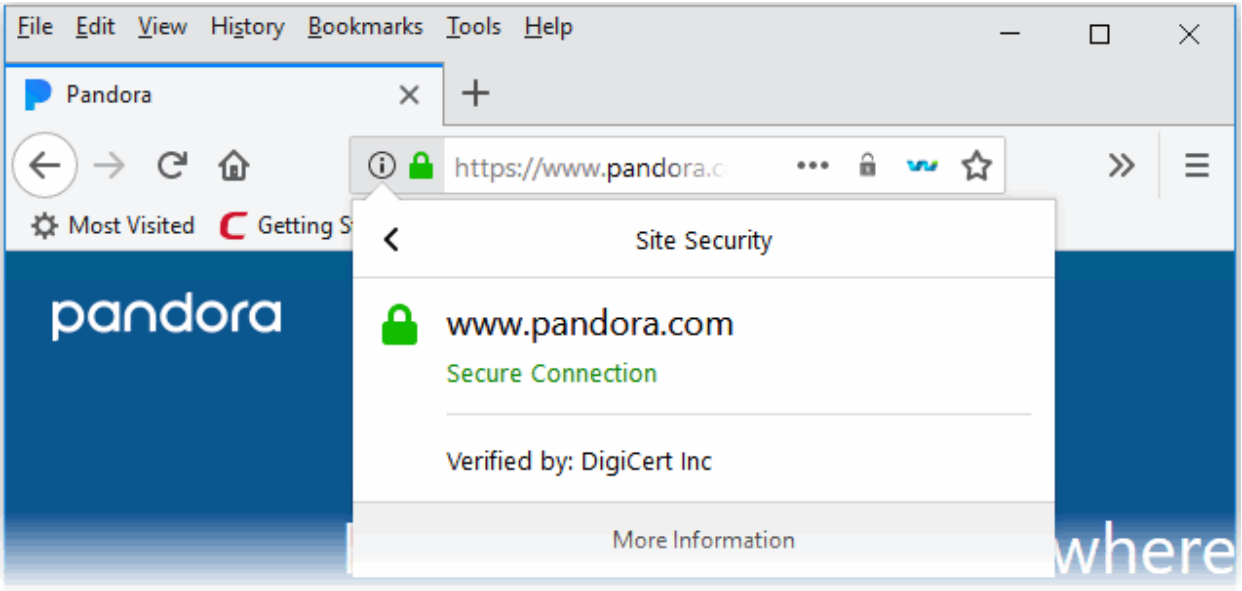
With a HTTPS connection, you can click the lock on the left of the address bar to view the website's SSL certificate. Apart from encrypting the information you submit and ensuring page integrity, the certificate also contains critical website identity information which allows you to verify that you are connected to the genuine Pandora website.

To force secure connections on the Pandora log-in page:

- You first have to physically change www.pandora.com to **https://**www.pandora .com
- Do this by placing your mouse cursor in the IceDragon address bar and typing 'https://' before www.pandora .com so the full URL says https://www.pandora.com
- Press enter. The page will re-load with a secure connection and thus make available the 'Force Secure Connections' padlock on the right:



- Click the padlock to enforce secure connections. All future visits to the Pandora log-in page will be automatically conducted over a secure, encrypted connection:



7.14. Website Security Indicators

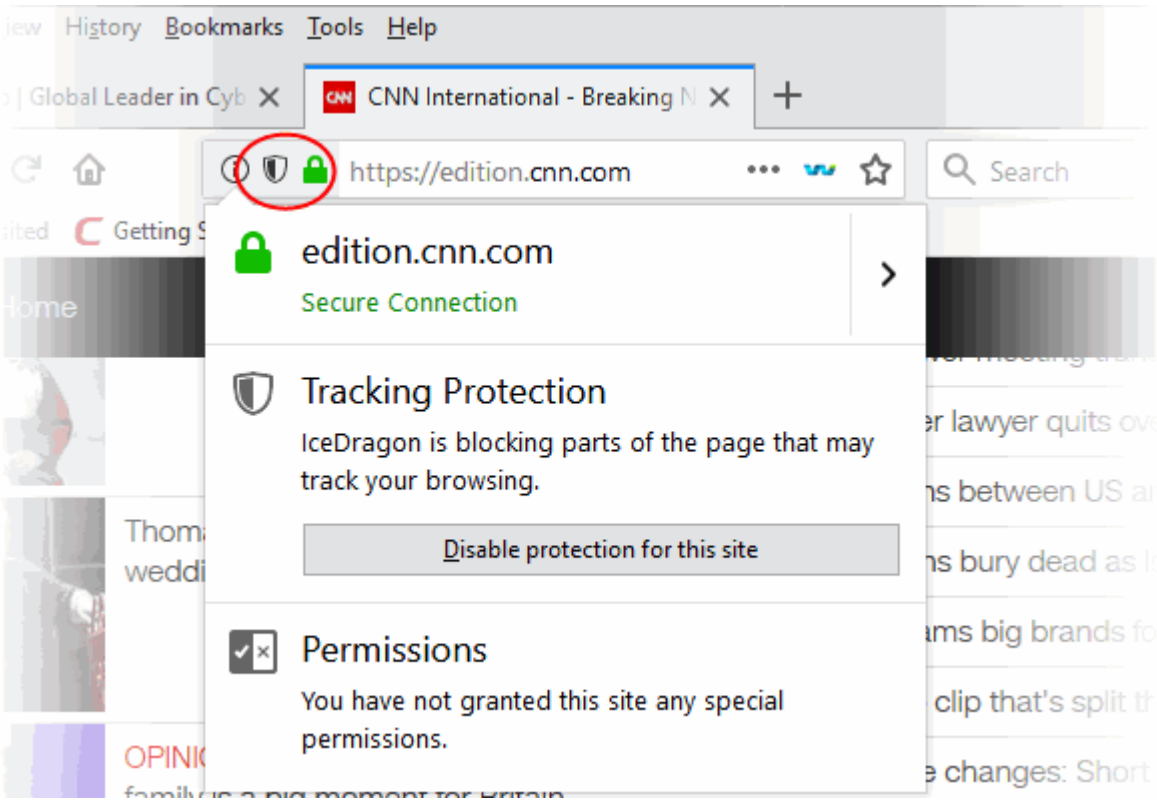
- IceDragon security indicators are shown in the website address bar and tell you about the safety of the connection between you and the website you are visiting.
- Transport Layer Security (TLS) and Secure Sockets Layer (SSL) are protocols which encrypt the connection between your internet browser and the web site you are visiting.
- All data passed over an SSL/TLS connection is encrypted, so it cannot be deciphered or understood by anybody who intercepts the communication. This prevents sensitive data like credit card numbers and passwords from being stolen by hackers.
- A website can implement encryption by installing an SSL/TLS certificate on their web server. Websites protected with an SSL/TLS certificate will show a lock icon in the browser address bar.

The following table show the different types of icons you will see in the Ice Dragon address bar:

Icon	Description
ⓘ	• The connection to the site is insecure. It does not have a TLS/SSL certificate installed. • The owner of the website has not been verified. • Do not submit confidential information or enter your username password to an insecure site.
🔒	• The green lock appears when IceDragon establishes a secure connection to a web site. Your connection to the site is encrypted. • The address of the site will begin with 'https://' (e.g. **https://example.com**) • If the site uses an Extended Validation SSL (EV SSL) certificate, the organization's name will appear next to the icon with green text.
ⓘ	• The page contains some insecure content. Even if a site has a certificate installed, you will see this error if the page loads images or other content from an insecure site.
⚠	• The page hosts dangerous content or has an invalid certificate.

To view the security Site Setting menu and Global Default information

- Click on the icon at the left of the URL in the address bar to view the identity information from the drop-down



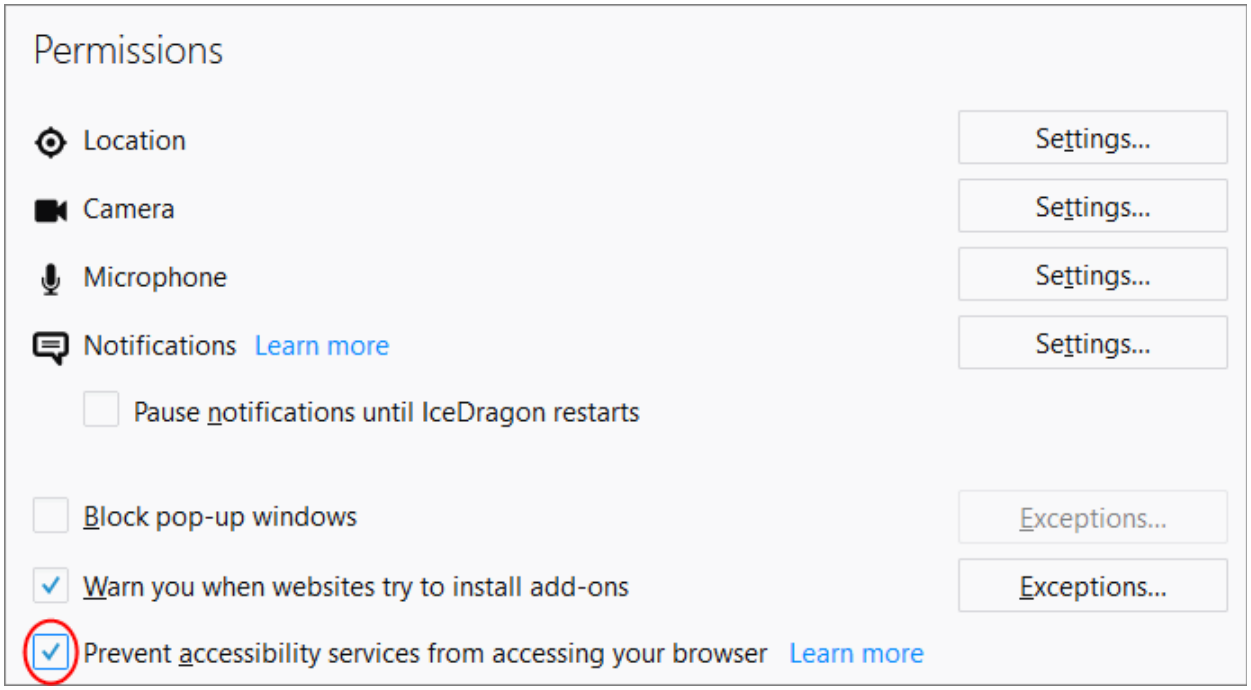
The 'Control Central' pane displays the current connection to the site.

- Click the right arrow on the Control Center to view the identity information of a certificate, the website's owner, and change settings for the site that you are currently visit.

- Tracking protection indicates whether or not a page contains elements that track you. See **Block Websites From Tracking Your Browsing Activities** for more detailed information.
- Permissions indicates any permissions you have set to the website. You can remove permission from the Control Center.
  - You can also manage items available from the 'Permissions' under the 'Privacy and security' section. See **View and Manage Permission Settings** for more details.

7.15. Disable Accessibility Indicator

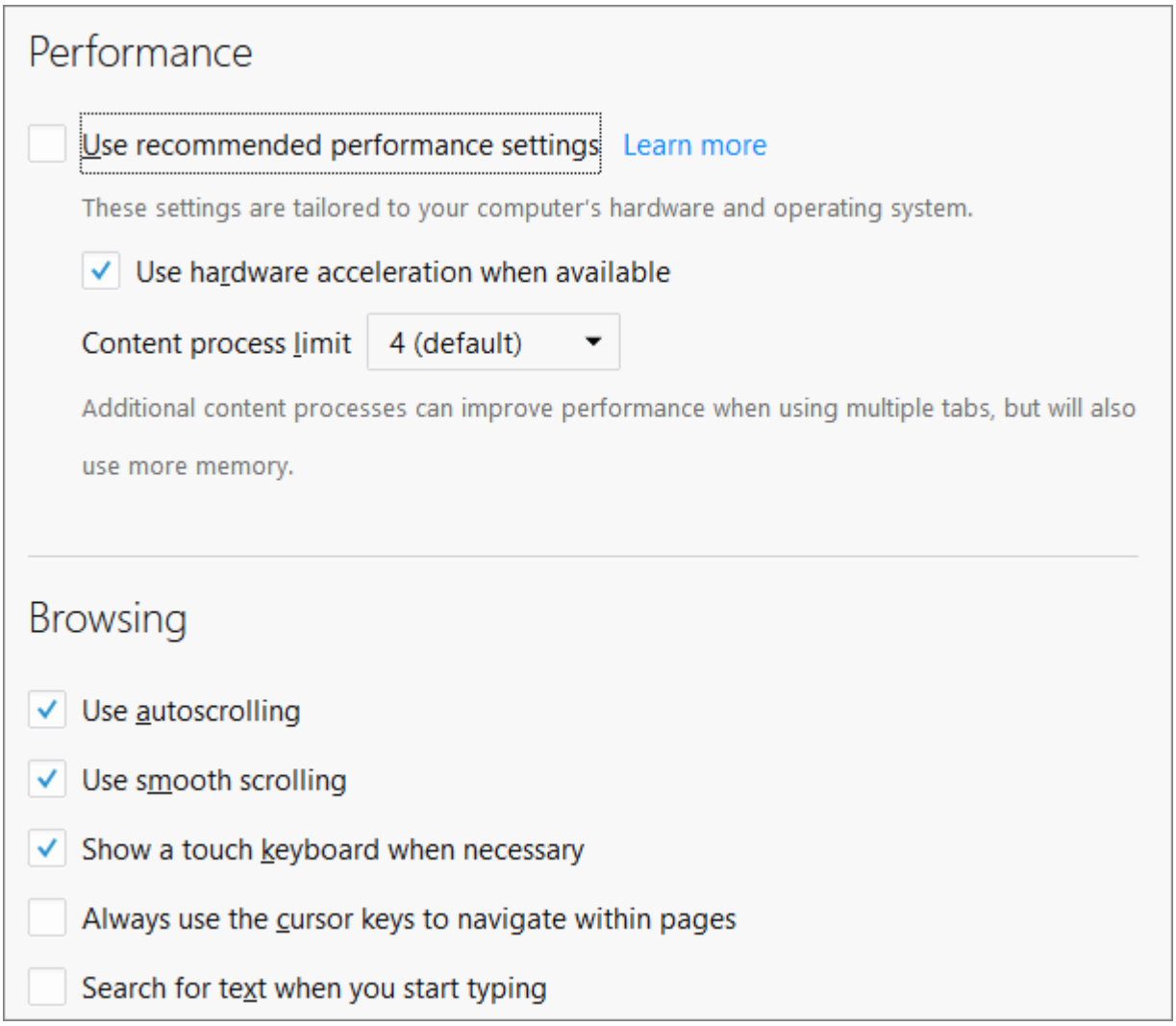
The Ice Dragon accessibility service is designed to improve how websites are rendered for physically impaired users. If the service is enabled, it allows 3rd party applications to inspect, monitor, visualize, and alter web page content.



- **Prevent accessibility services from accessing your browser** – Enable this checkbox if you do not wish to extend these privileges to accessibility services. You may want to do this if you do not have any physically impaired users that use your Ice Dragon installation.

7.16. Configure IceDragon Performance and Browsing Settings

- IceDragon let you tweak certain hardware settings to ensure the fastest browser performance without placing undue burden on system resources.
- Hardware acceleration, for example, can improve playback in YouTube and 3D Earth.

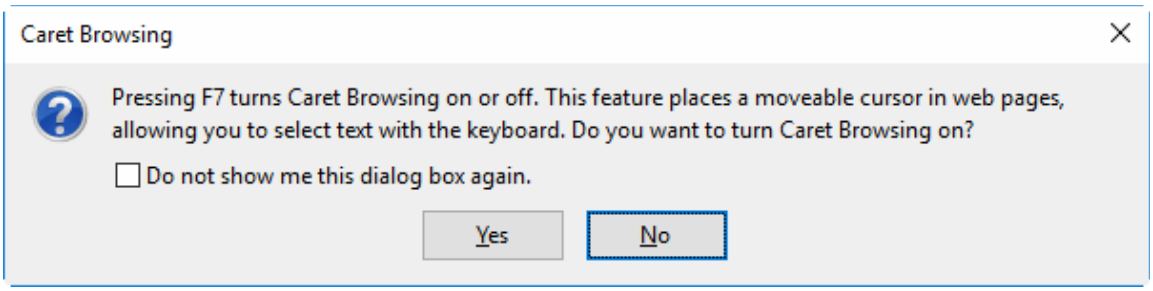


- **Use recommended performance settings** automatically setups your browser with computer settings.
  - **Use hardware acceleration when available** - Instructs the browser to use your graphics processor to handle graphically intensive pages, reducing the load on your main processor. This increases the speed at which the web-pages are loaded and improves your browsing experience.
  - **Content process limit** – Improves performance by increasing the number of processes assigned to handle video content. Adding more processes will also commit more memory to the task, which might degrade the performance of other tasks that are running on your computer.
- **Use auto autoscrolling** – If selected, you can click the center mouse button on a web page to enable auto-scrolling. You can then move the page up or down by simply moving your mouse. Note – make sure to click on an 'empty' area of the page. Middle-clicking on a link will open the linked page in a new tab.
- **Use smooth scrolling** – Makes the page to scroll up or down smoothly when you press the 'Page Up' or 'Page Down' Keys. This option is useful when reading lengthy pages as it makes it easier to resume from where you left off.
- **Show a touch keyboard when necessary** – Allows Ice Dragon to detect touchscreen devices. An on-screen keyboard will appear when entering text on a touchscreen device.

  To disable touch screen detection
  - Type: **about:config** in the address bar
  - Confirm that you will be careful in the warning message
  - Enter **ui.osk.detect_physical_keyboard** in the text box. It will be set to **false**
- **Always use the cursor keys to navigate within pages** - Enables 'Caret browsing' within the webpage –

displays a blinking text selection cursor that can be moved using the arrow keys in your key board. The cursor enables you to select a piece of text from the webpage to your clipboard directly, point to links, move from field from field and so on, using the keyboard.

- Alternatively, press F7 from your keyboard.



- Click 'Yes'

- **Search for text when you start typing** – Completes searches quicker by starting your search immediately when you start typing. Search results will be shown in real-time under the search box.
- **Check your spelling as you type** – If enabled, the browser will check the spelling of every word or phrase you type into various fields of a web-form. This features requires dictionaries to be downloaded.

  To download a dictionary, while typing inside a field in a web-form, right-click on the field, select 'Languages' from context sensitive menu and select 'Add Dictionaries'. You will be taken the webpage from which you can download required dictionaries.

7.17. Network Proxy Settings

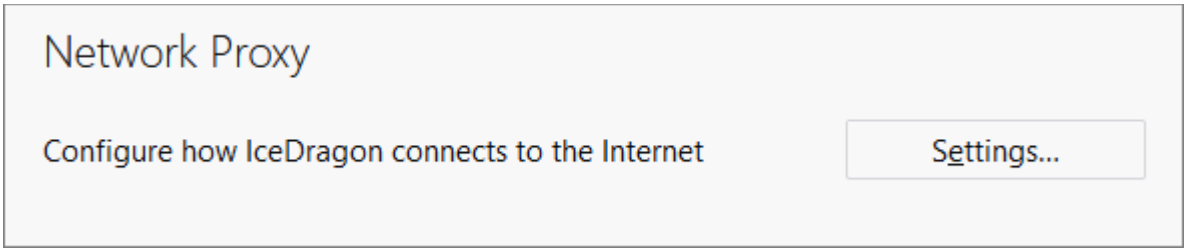
The 'Network Proxy' area lets you configure how IceDragon should connect to internet. For example, if your organization or internet service provider (ISP) may require you to connect to the internet through a proxy server.

You may consider using a proxy for the following reasons:

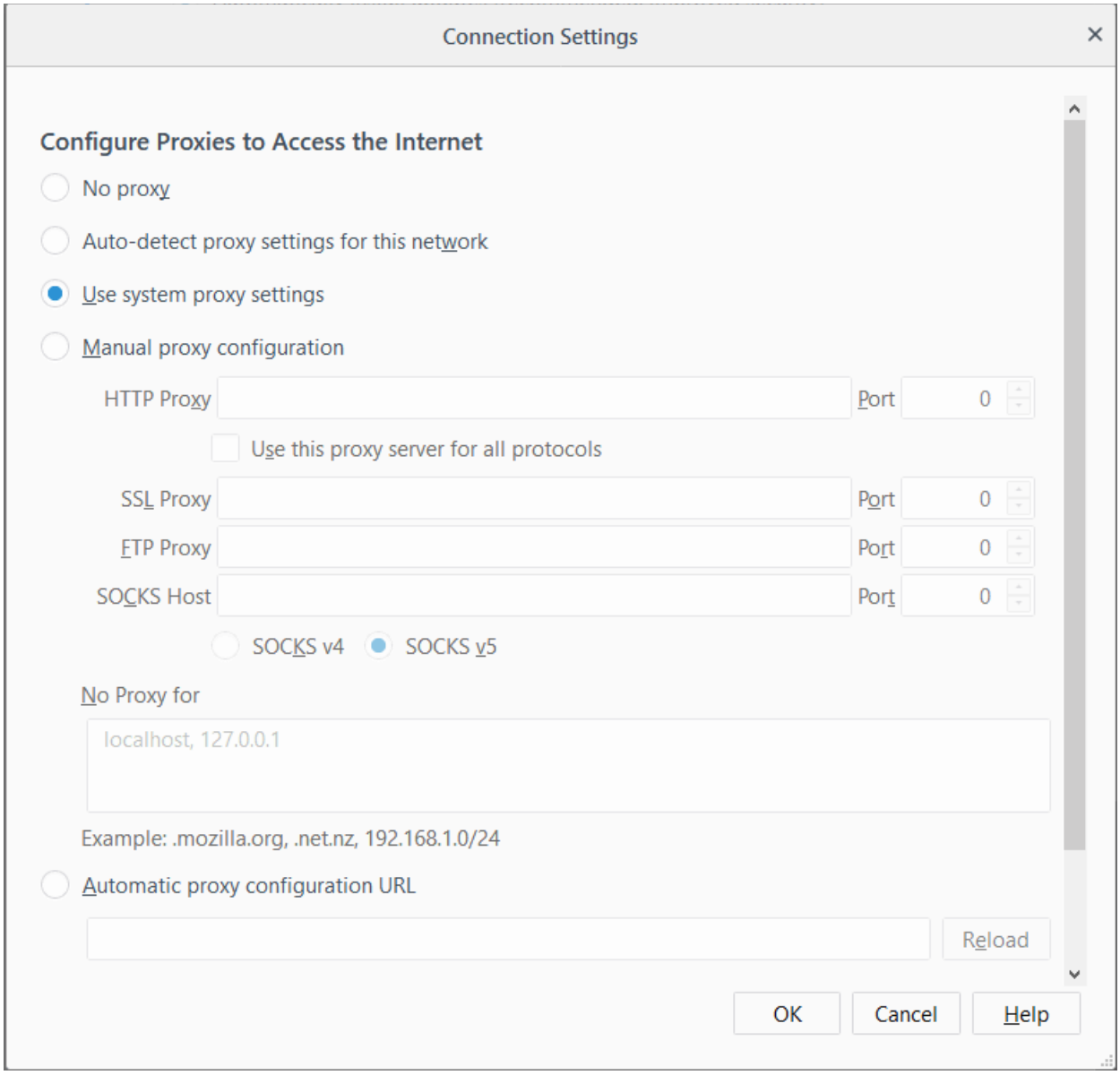
- To anonymize your connection to the internet
- To speed up internet access
- To implement access policy on a network (for example, to block undesirable websites)
- To audit internet usage
- To scan traffic for malware prior to it entering or leaving the internal network

To set up a proxy connection

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' > 'General'
- Scroll to the 'Network Proxy' section



- Click 'Settings'. The 'Connection Settings' dialog will open:



- **No proxy –** Select if you don't want to use a proxy.
- **Auto-detect proxy settings for this network** – If enabled, IceDragon will automatically detect the proxy settings for your network.
- **Use system proxy settings -** If selected, you can configure proxy settings for your operating system.
- **Manual proxy configuration -** If selected, allows you to set more than one proxy server. Each proxy requires a hostname and a port number.
  - Checkbox **'Use this proxy server for all protocols'** for the same proxy name and port number used for all protocols
  - **No Proxy For** - List of hostnames or IP addresses that will not be proxied. Use <local> to bypass proxying for all hostnames which do not contain periods.
- **Automatic proxy configuration URL** – If selected, determines to run proxy server automatically. Enter the URL and click 'OK' to save changes and load the proxy configuration.
  - Reload: Load the currently available proxy configuration.
- Check-box 'Do not prompt for authentication if password is saved' to set your proxy credentials to enter the proxy's username ans password.
- Check 'Proxy DNS when using SOCKS v5' box to enable remote DNS when use SOCKet Secure v5.
- Click 'OK' for the settings to take effect.

8. Downloads

This section explains how to download a file from the internet, change default download location, and view/clear download history. Click the following links to find out more:

- **Download a File**
- **Change Download Location**
- **View download history**
- **Clear download history**

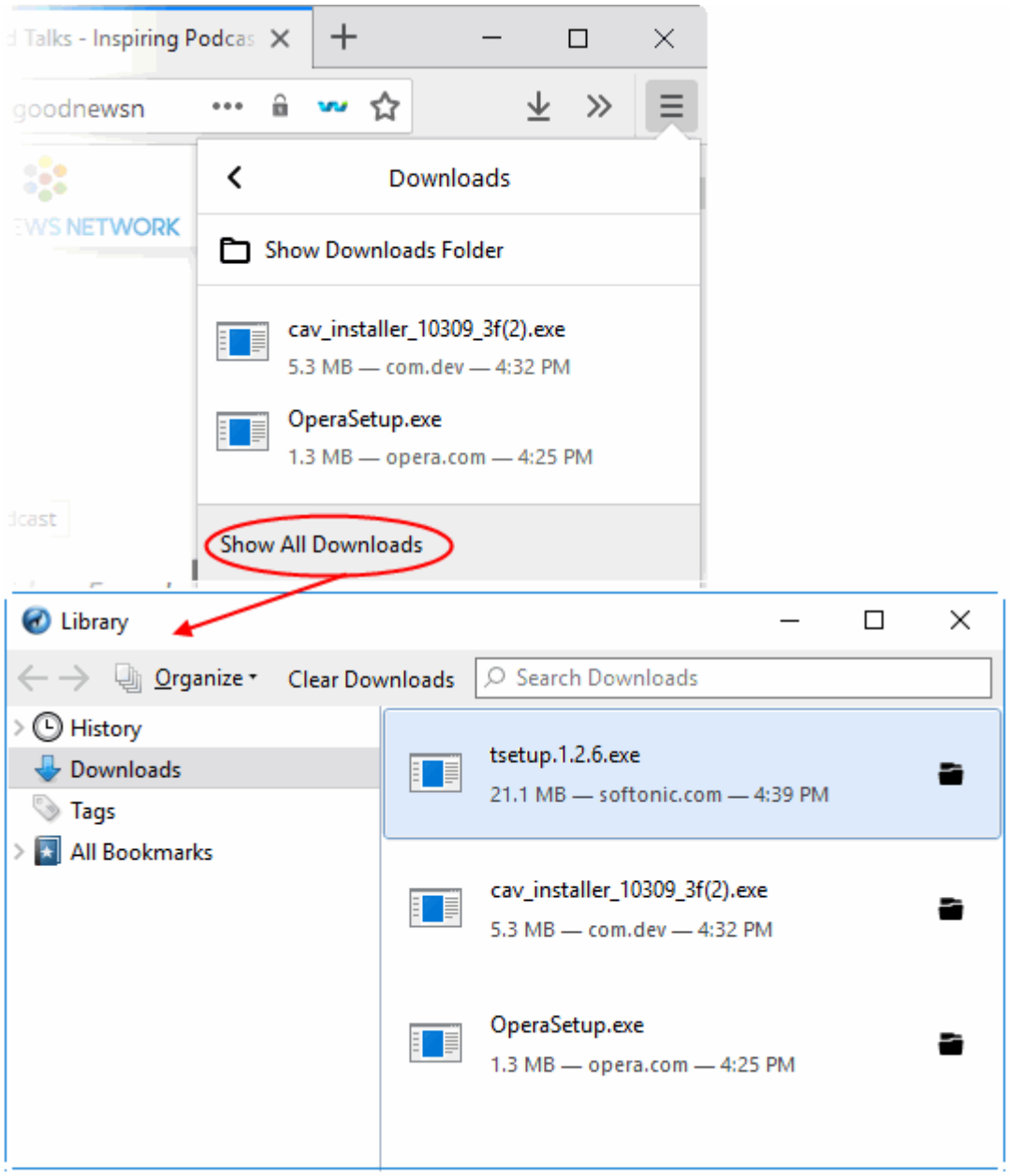
8.1. Download a File

When you start downloading a file from the internet, Comodo IceDragon displays the progress of the download in the navigation toolbar (click the downward pointing arrow to view downloads).

It also scans for viruses to prevent malware downloads.

The downloads window displays information about each download, including file name, file size, time remaining before the download is complete, where the file was downloaded from, and the time or date of the download.

- To view the three most recently downloaded items, click the download button in the navigation toolbar
- To view all downloads, click 'Show All Downloads'. This will open the 'Library' interface and a list of all downloaded apps or files



- To search for a particular download, type its name in the search box at the top of the interface

From here you can:

- **Pause**: Pauses any downloads currently in progress. Right-click the download and select 'Pause'. To continue downloading files, right-click the file then select 'Resume'
- **Cancel:** Cancels the download. Right-click the file and select 'Cancel' button
- **Open the file:** Double-clicks on the entry to open the file
- **Open the file's folder:** Right-click on a download and select 'Open Containing Folder' to view the folder that contains the file. See **Change Download Location** to specify other location.
- **Go To Download Page:** Right-click on the file and select 'Go to download page' to open the URL the file was downloaded from
- **Remove the file's entry**: If you do not wish to keep a record of a particular download, right-click on the download and select 'Remove From History'. This will not delete the file itself
- **Retry:** If for any reason a download does not complete, use the 'Retry' curve arrow next to the file entry and

IceDragon will restart the download

- **Clear Downloads:** Clears the whole list. This will not delete the downloaded files
- **Copy Download Link**: Copies the download URL to clipboard.

Further reading related to the topic of this page:

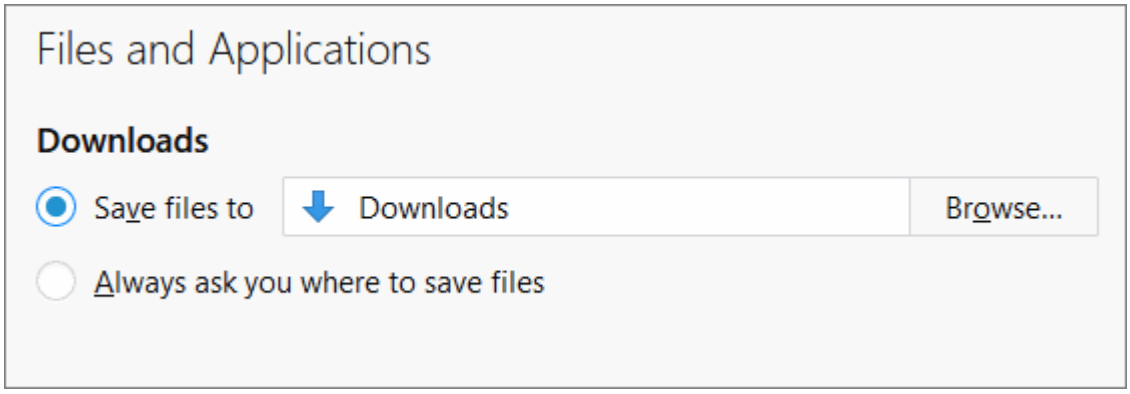
- Change Download Location
- View Download History
- Clear Download History

8.2. Change Download Location

By default, Comodo IceDragon saves all downloaded files to C:\Users\<user name>\Downloads. You can change this location or change settings so that you are asked for the location every time you start the download.

To change the download location

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click the 'Options' > Select 'General' > 'Files and Applications'
- Under the 'Downloads' section, choose how you want to save files:



- **Save files to** - IceDragon automatically saves all downloads to the specified folder. If you want to download the application in a location other than the default location, click 'Browse' to choose a different location
- **Always ask me where to save file** - IceDragon asks you to select a folder for every download you wish to save

Further reading related to the topic of this page:

- Download a File
- View Download History
- Clear Download History

8.3. View Download History

You can view a list of downloaded files in the 'Downloads' page. The files are listed in chronological order.

To view your download history

- Open the 'Library' interface by clicking the 'Download' button then select 'Show All Downloads'
  - Click on a file to open it

- Click 'Remove From History' to remove a specific download from the list.
- Click 'Open Containing Folder' to see the location of the file in your computer. Please note that this will not work if the file has been moved.
- Click 'Go to Download Page' opens the URL from which the file was downloaded.
- Click 'Copy Download Link' to copy the URL from which the file was downloaded.
- Click 'Clear Downloads' to remove all downloads from the list. This will not delete the files themselves.
- Enter the name of a download in the search box to find a specific item.
- Use the shortcut keys 'CTRL+J to open the downloads page.

Further reading related to the topic of this page:

- **Download a File**
- **Change Download Location**
- **Clear Download History**

8.4. Clear Download History

Click the following links for more help:

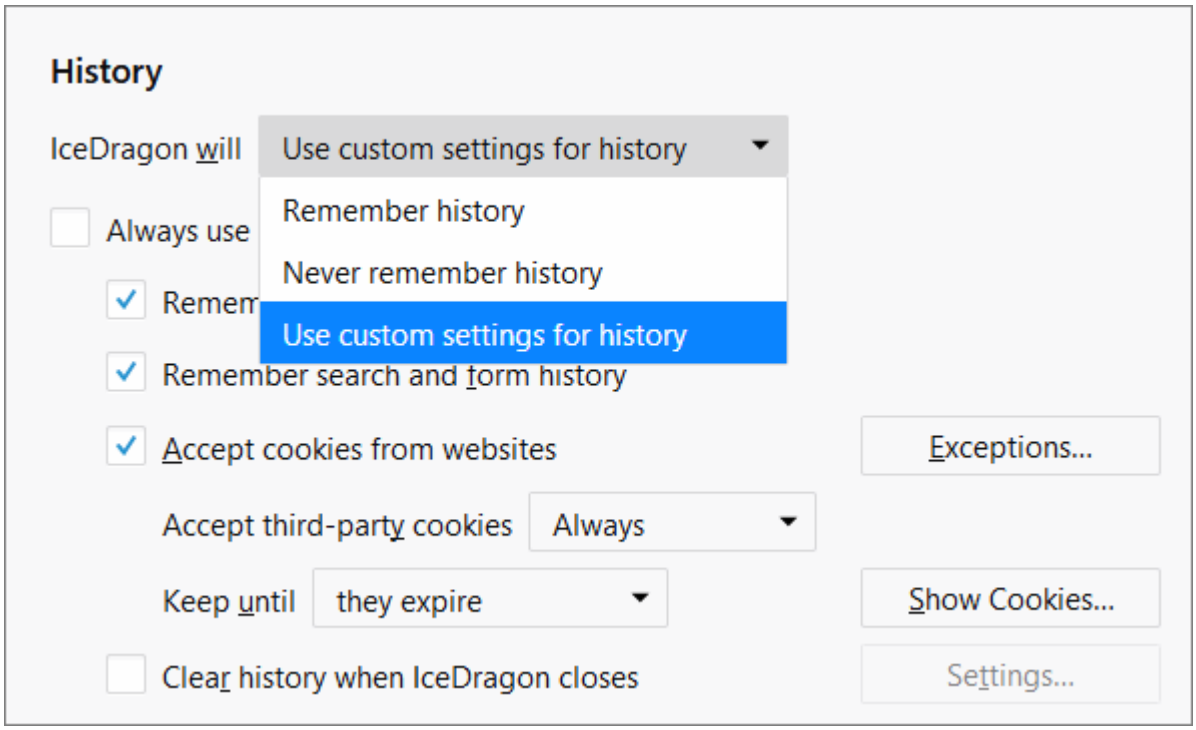
- **To remove specific items**
- **To clear a history automatically**
- **To clear a download history manually**
- **To remove a single website**

To remove specific items from download history

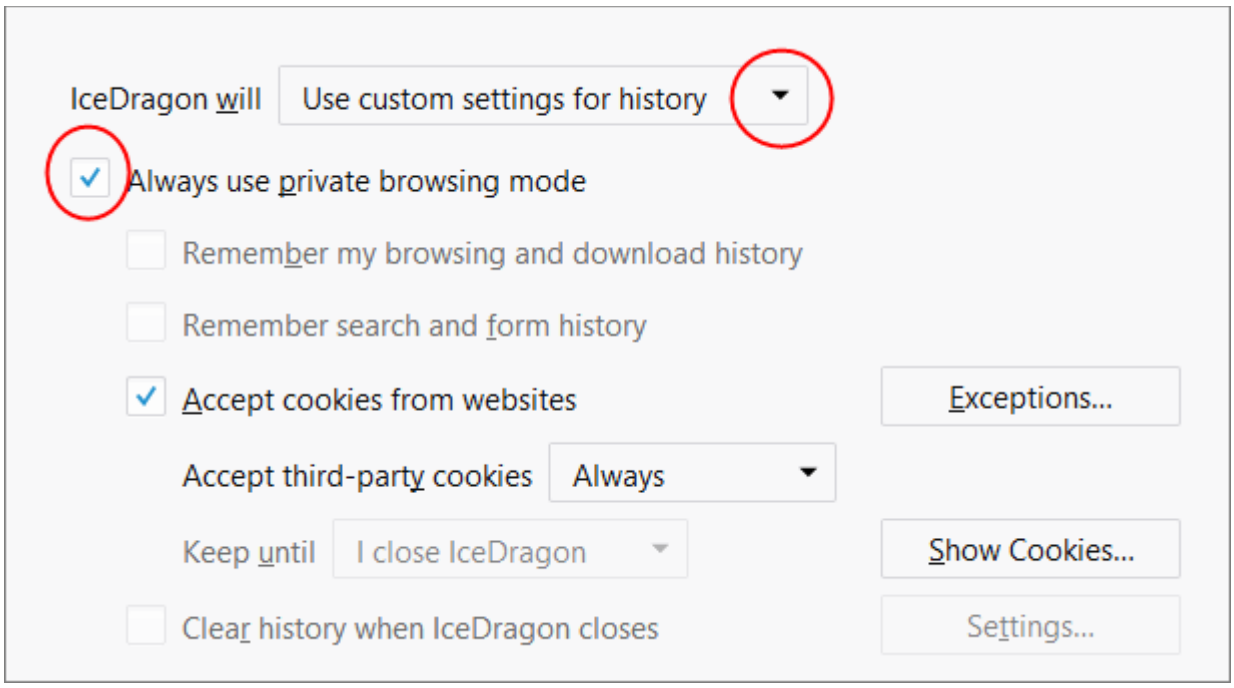
- Click the 'Download' button then click 'Show All Downloads'
- In the 'Library' interface right-click the item and select 'Remove From History'

To clear history automatically

- Click the hamburger/ 'Open Menu' button at the top-right then select 'Options'
- In the 'Privacy and Security' > 'History' section
- Select the 'IceDragon will:' drop-down



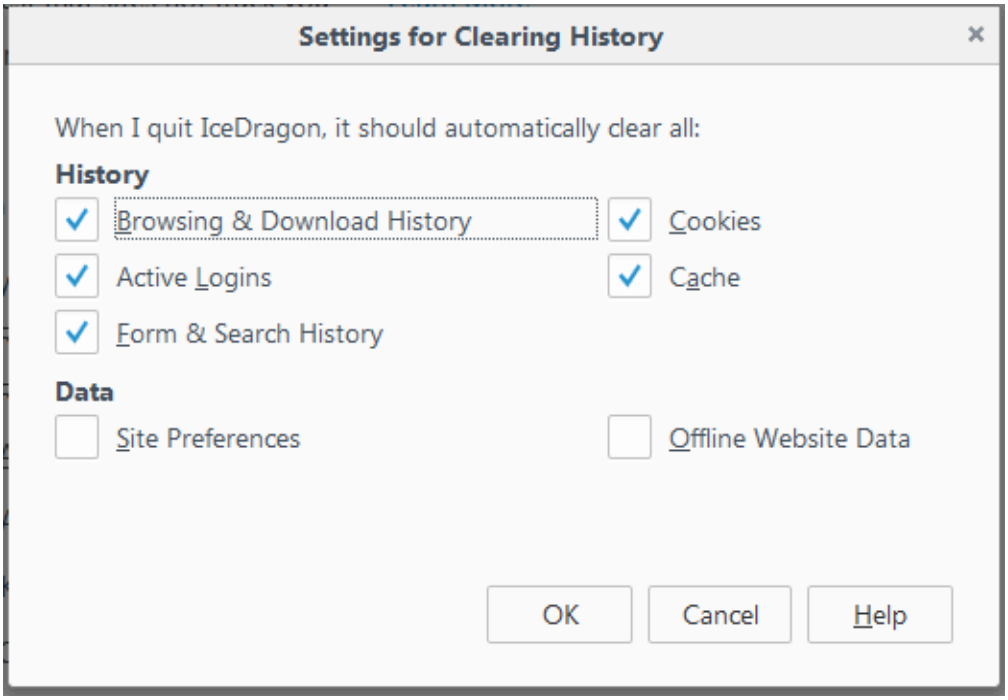
- **Remember history** - Keeps a record of the pages you have visited, uses the text you have entered into the search bar or into form fields, accepts cookies from sites until they expire
- **Never remember history** - Keeps no record of your browsing history, will not remember text you enter into form fields or the search bar, deletes cookies when you close IceDragon
- **Use custom settings for history:**



- **Always use private browsing mode** - CID will not remember any new history the next time it starts.
  - **Remember my browsing and download history** - CID keeps a list of the pages you have visited and a list of files you gave downloaded.
  - **Remember search and form history** - The text you enter into form fields or the search bar will be remembered. For more information, see **Form Autofill** topic.

- **Accept cookies from sites** - CID will accept cookies from sites. Click 'Exceptions' to manages Allow /Allow for Session or Block cookies. For more information, see **Manage cookies** topic.
  - **Accept third-party cookies** - CID accepts cookies
  - **Keep until:**
    - **they expire** - Allows the sites you visit to specify how long IceDragon should keep their cookies.
    - **I close IceDragon** - Removes cookies when you close CID.
- **Clear history when IceDragon closes** - Saves items that will be deleted when you close IceDragon.

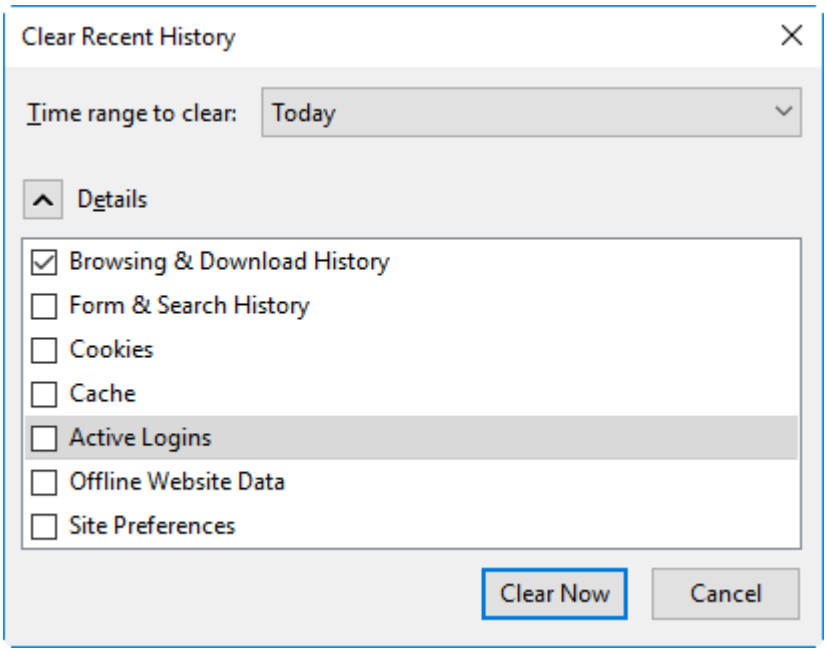
- **Exceptions** - Displays the 'Exceptions' window
- **Show Cookies** - Displays the 'Cookies' window
  - Select 'Use custom settings to history'
  - Check the box 'Clear history when IceDragon closes' > 'Settings' button next to it to manage what items are deleted
  - The 'Settings for Clearing History' dialog will open:



  - Select the items that have to be automatically cleared each time you quit.
- Click 'OK'.

To clear download history manually

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'Library' > 'History'
- Click the 'Clear your recant history'
- In the 'Clear Recent History' dialog, select the period for which you want to delete the download history from the 'Time range to clear' drop-down box
- Click 'Details' arrow to select the type of information will get cleared

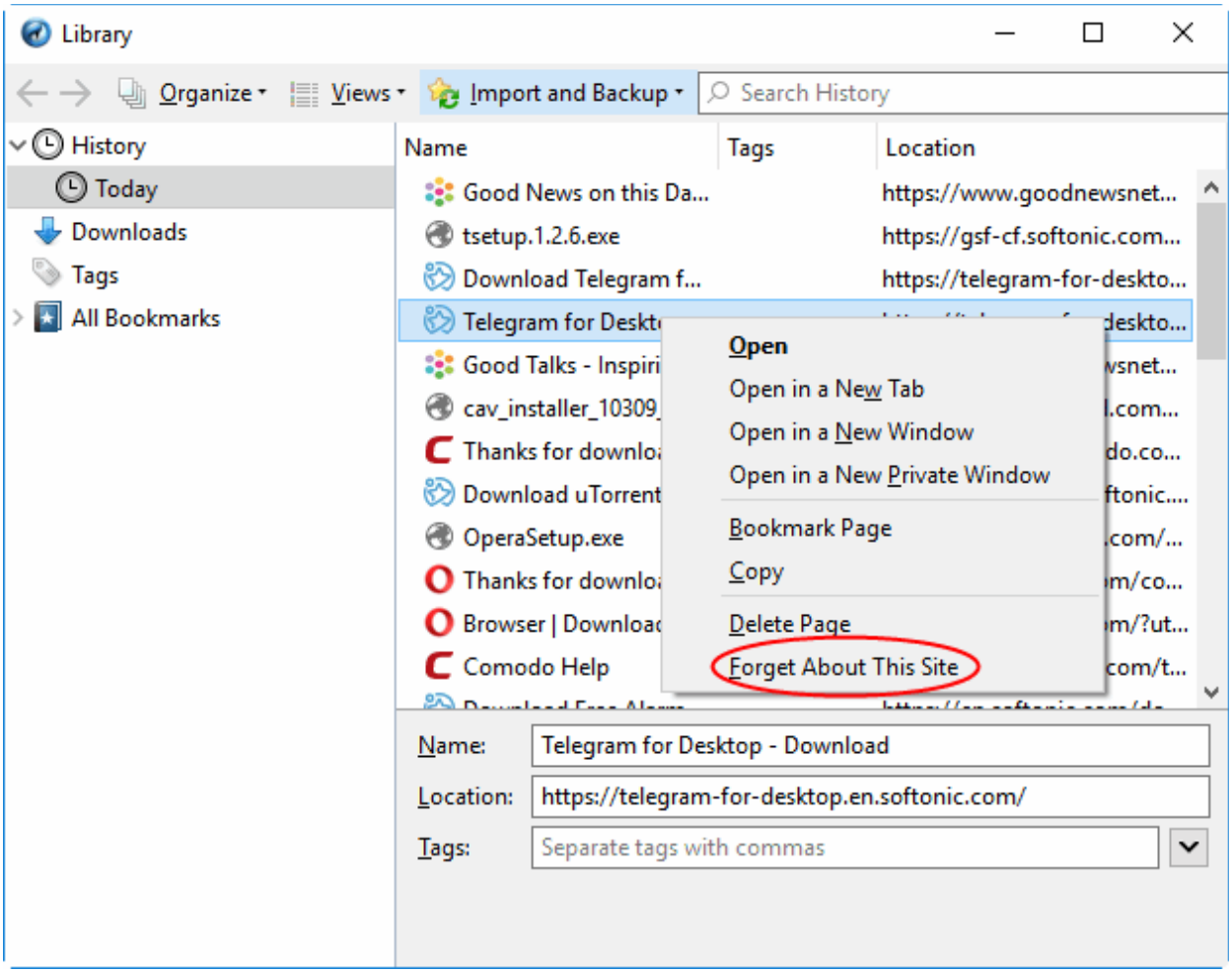


- Click the 'Clear Now' button to delete history for the selected period and type of information. Note: Any downloaded files will remain on your computer. This action just clears out your web data.

To remove a single website from the download history

This option deletes all history items (browsing and download history, cookies, cache, active logins, passwords, saved form data, exceptions for cookies, images, pop-ups).

- Click the 'Download' button and select 'Show All Downloads' then click 'History' from the left panel
- Search the website you want to remove from your history by typing its name in the 'Search History' field in the top-right corner.
- Right-click on the site you want to remove, scroll down the 'Forget About This Site'



Further reading related to the topic of this page:

- **Download a File**
- **Change Download Location**
- **View download history**

9. Introduction to Add-ons

Add-ons, extensions and plug-ins help expand the basic feature set of Comodo IceDragon with additional capabilities.

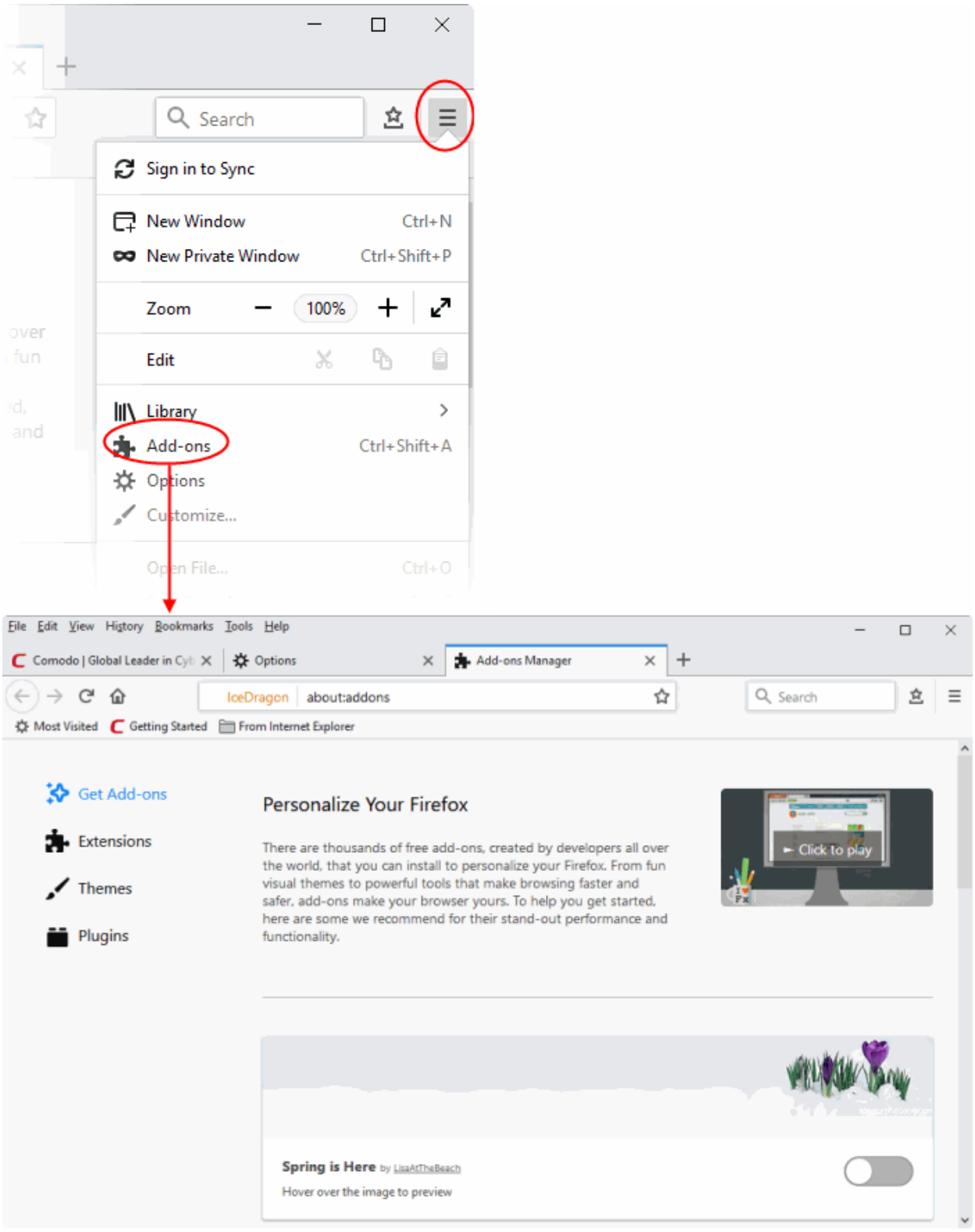
There are thousands of add-ons available, adding a wide variety of functions to IceDragon. For example, you can get add-ons to:

- Play certain video formats
- Handle more file types
- Translate web pages
- Change the IceDragon theme
- Block adverts
- Access your favorite shopping websites
- Use animated mouse pointers
- Quickly update your Facebook profile

- ...and much more

To access the add-ons interface

- Click the hamburger/ 'Open Menu' at the top-right > Select 'Add-ons'.



Comodo IceDragon enables you to install three types of Add-ons.

- **Extensions** - Add new features or modify existing features. Examples include extensions to block

advertisements, to download videos from websites, to add features from other browsers and to integrate IceDragon with websites like Facebook.

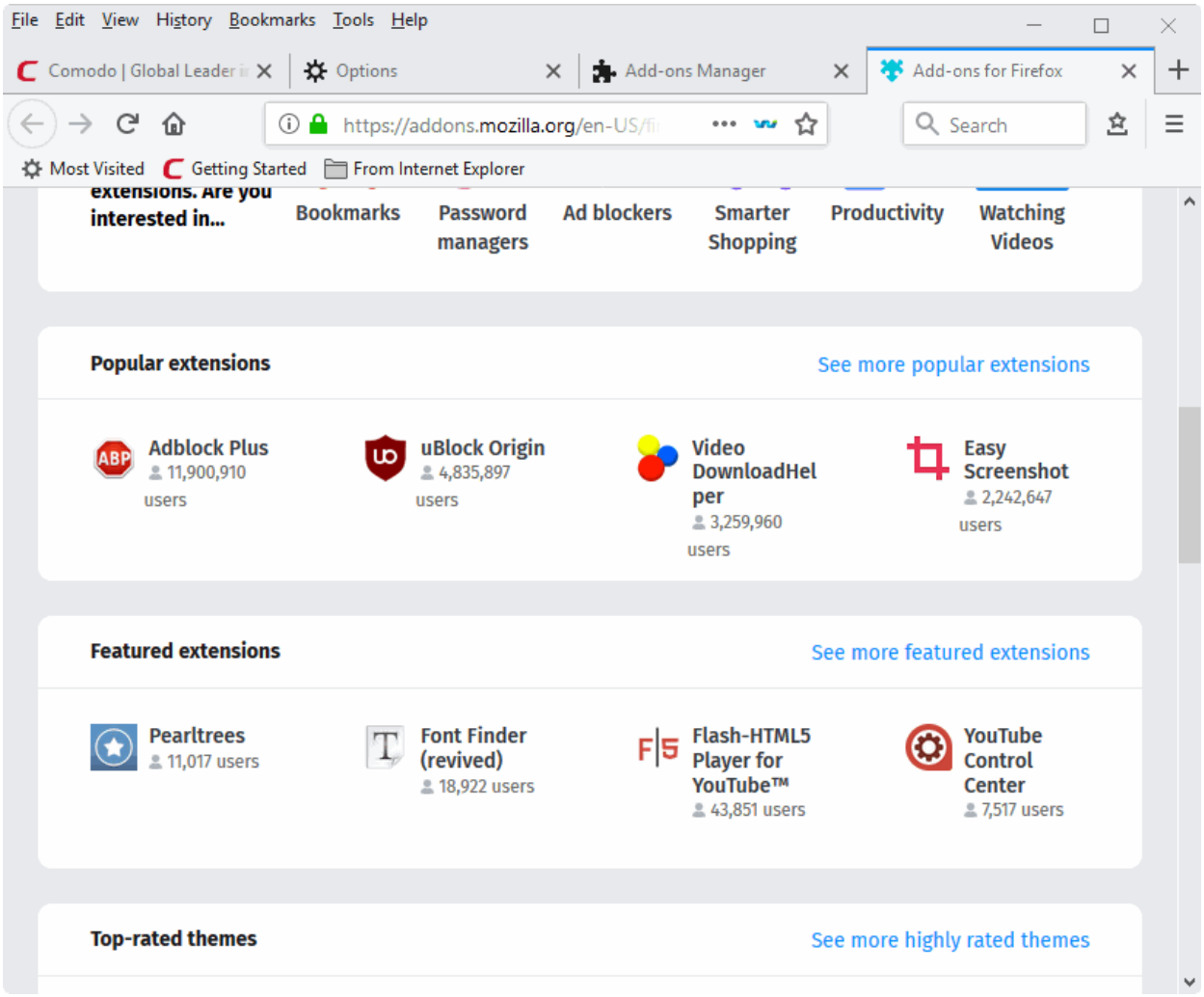
- **Themes** - Change the look of overall look of the browser including buttons, menus and other browser elements. 'Personas' decorate the menu bar and tab strip with a background image.
- **Plugins** - Add support for different kinds of internet content. This includes patented formats like Flash, QuickTime, and Silverlight that are used for video, audio, online games, presentations.

Click the links below for more help:

- **Download and Install Add-ons**
- **Install Add-ons from local storage**
- **Configure updates for add-ons**

9.1. Download, Install and Configure Add-ons

- Click the hamburger menu button at top-right
- Select 'Add-ons'
- This will open the 'Get Add-ons' screen
- Click 'See more add-ons!' at the bottom of the page to visit the Mozilla add-ons page.
- You can search for a particular add-on or browse through the add-on categories.
- Each add-on comes with a brief description and you can also read reviews and comments from fellow users.

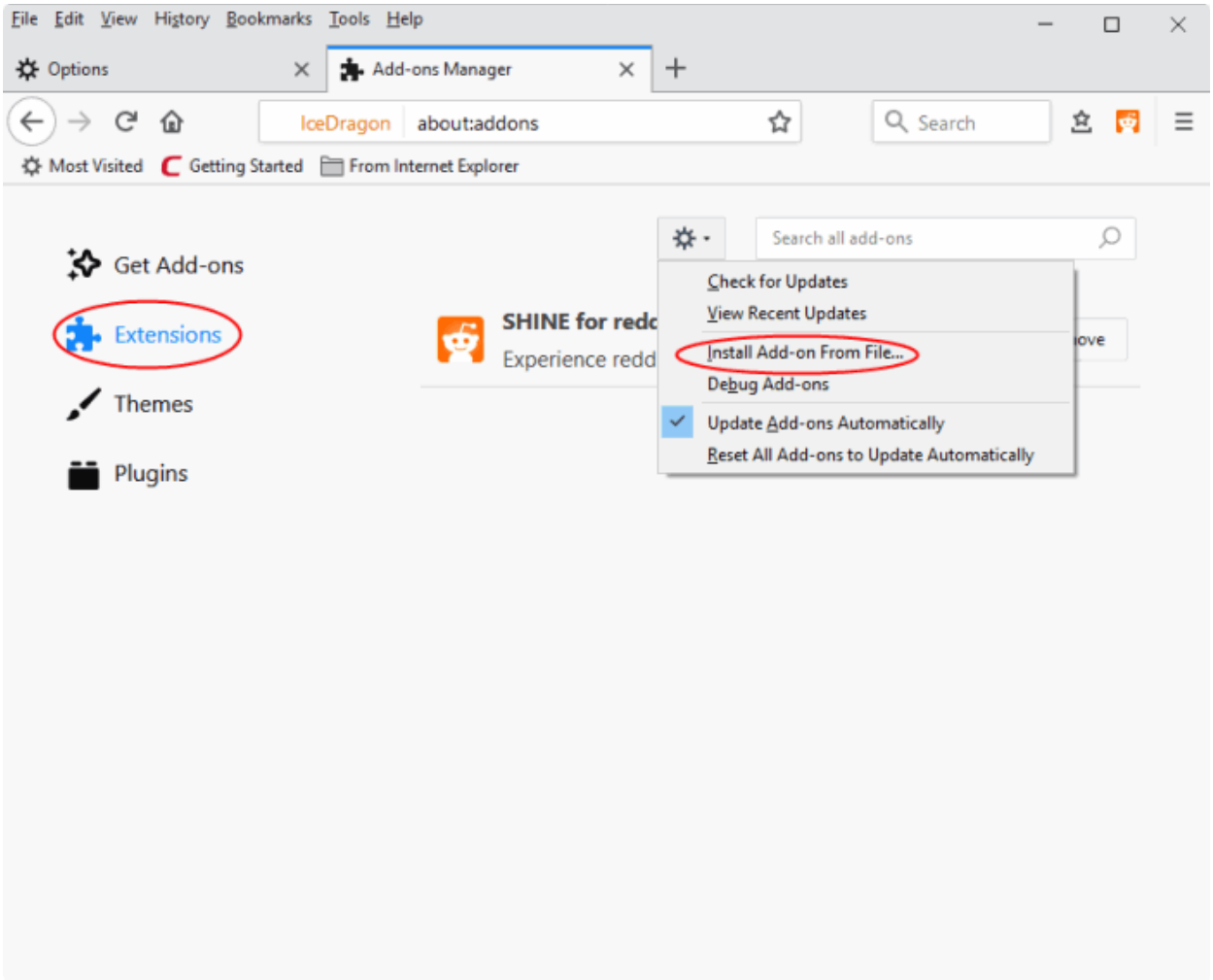


- Once you have chosen your add-on, click 'Add to Firefox' then click 'Add' at the prompt. All Firefox extensions can be installed to IceDragon.
- The add-on will be downloaded and a notification of the successful installation will be displayed.
- Some add-ons may require your browser to be restarted for the installation to take effect. If it prompts you, click 'Restart Now'.

9.1.1. Install Add-ons from Local Storage

If you have a local copy of an add-on installer, you can install it as follows:

- Click the hamburger button and select 'Add-ons'
- Click 'Extensions' on the left then click the gear icon on the right
- Select 'Install Add-on From File' from the options.



- Navigate to the location of the .xpi file you want to install
- Click 'Open'
- The add-on will be installed. If required, restart the browser to enable the add-on.

9.1.2. Configure Updates to Add-ons

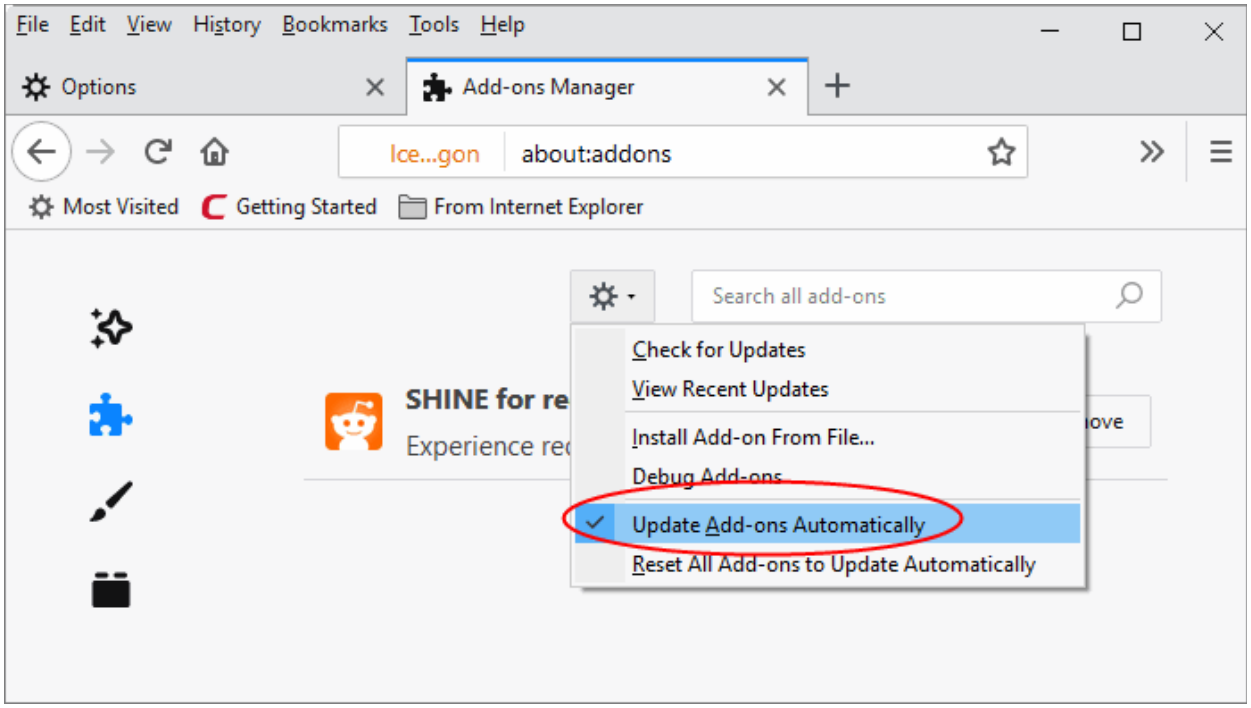
Ice Dragon can automatically check for and install updates for add-ons.

To configure updates

- Click the hamburger/ 'Open Menu' button at the top-right > select 'Add-ons'.

The' Add-Ons Manager' page will open in a new tab:

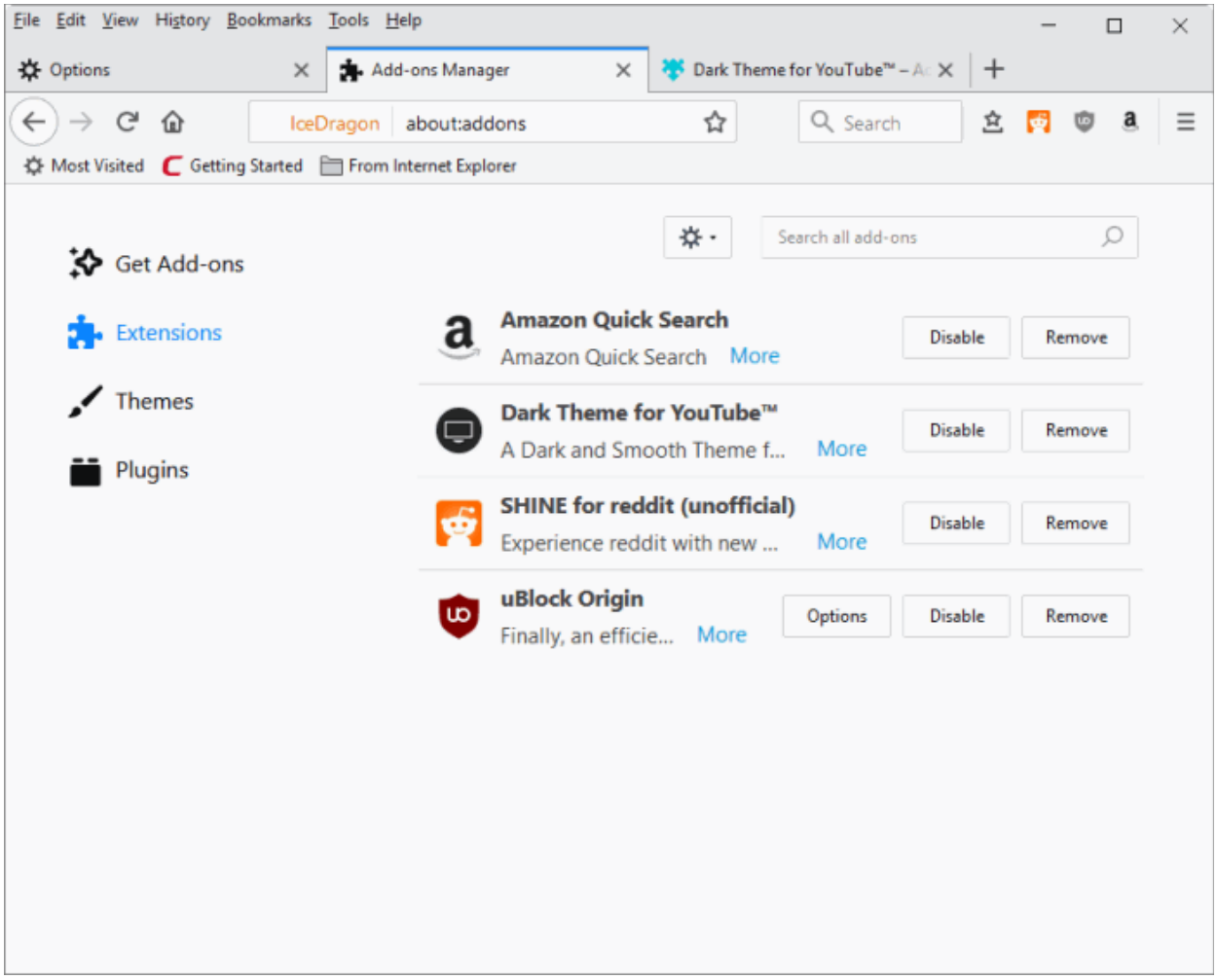
- Click the gear icon on the upper-right of the screen
- Click 'Check for Updates' to manually update your add-ons
- Click 'View Recent Updates' to see your most recently updated add-ons
- Enable 'Update Add-ons Automatically'.



9.2. Manage Extensions

To view installed Extensions

- Click the hamburger button at top-right
- Select 'Add-ons'
- Click 'Extensions' on the left to view a list of all installed extensions.



Most extensions allow you to configure and customize them as per your requirements.

- To configure an extension, click 'Options' then edit preferences in the resulting dialog.
- To turn an extension off, click the 'Disable' button
- To uninstall an extension, click the 'Remove' button

9.3. Customize the Appearance of IceDragon

Why not get creative? Personas and themes let you to change the entire look and feel of Comodo IceDragon.

Available through the add-on manager interface, there are two main ways to customize IceDragon's appearance:

- 'Personas' - Lightweight themes that let you customize the menu bar and tabs with background images
- 'Themes' - Enables you to customize the whole browser window

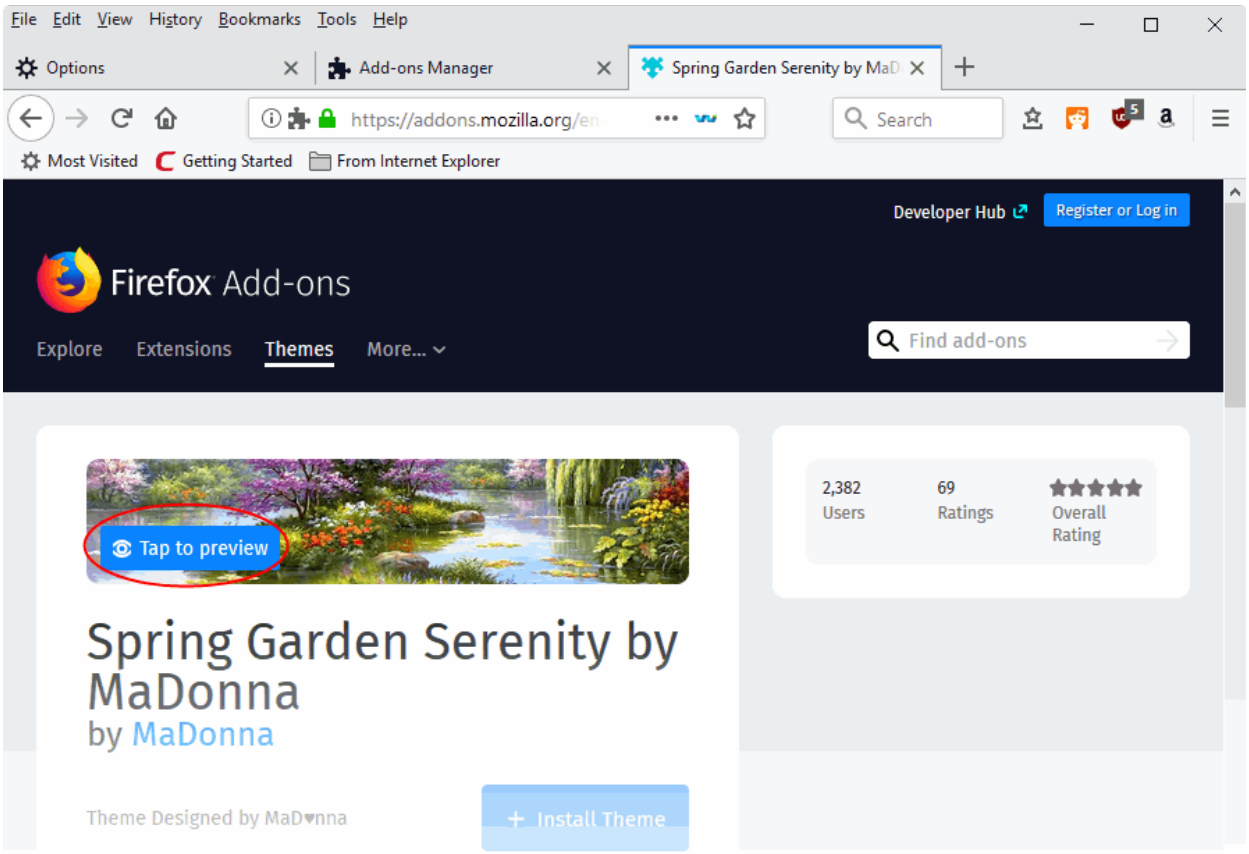
Click the links below for more help:

- **Download and install Personas and Themes**
- **Manage Personas and Themes**

Download and install Personas and Themes

- Click the hamburger button at top-right
- Select 'Add-ons'.

- Click 'See more add-ons!' at the bottom to view the Firefox add-ons website.
- Click 'Themes' to view recently added and popular themes.
- Use the 'Categories' on the left to narrow your search.
- Select the theme and click 'Tap to preview' to see how a Persona will look.



- If you want to install a Persona, click the 'Install Theme' button
- To browse available themes, click 'See more highly rated themes'
- Once you find a theme that you like, click it to be taken to its download page.

Manage Personas and Themes

You can easily choose which Persona or Theme you wish to use by clicking the 'Themes' link in 'Add-ons Manager':

- To use a Theme or Persona, click 'Enable'. Personas will be applied immediately but Themes need the browser to be restarted.
- To restore the browser to default Theme, click 'Disable' in the row of currently applied Persona or Theme.
- To remove a persona or theme permanently, click 'Remove' on its row.

9.4. Manage Plugins

- Plug-ins are a type of add-on that enable IceDragon to handle the internet content in formats that the browser do not support.
  - Examples include patented formats for documents, video, audio, online games, presentations and so

on.

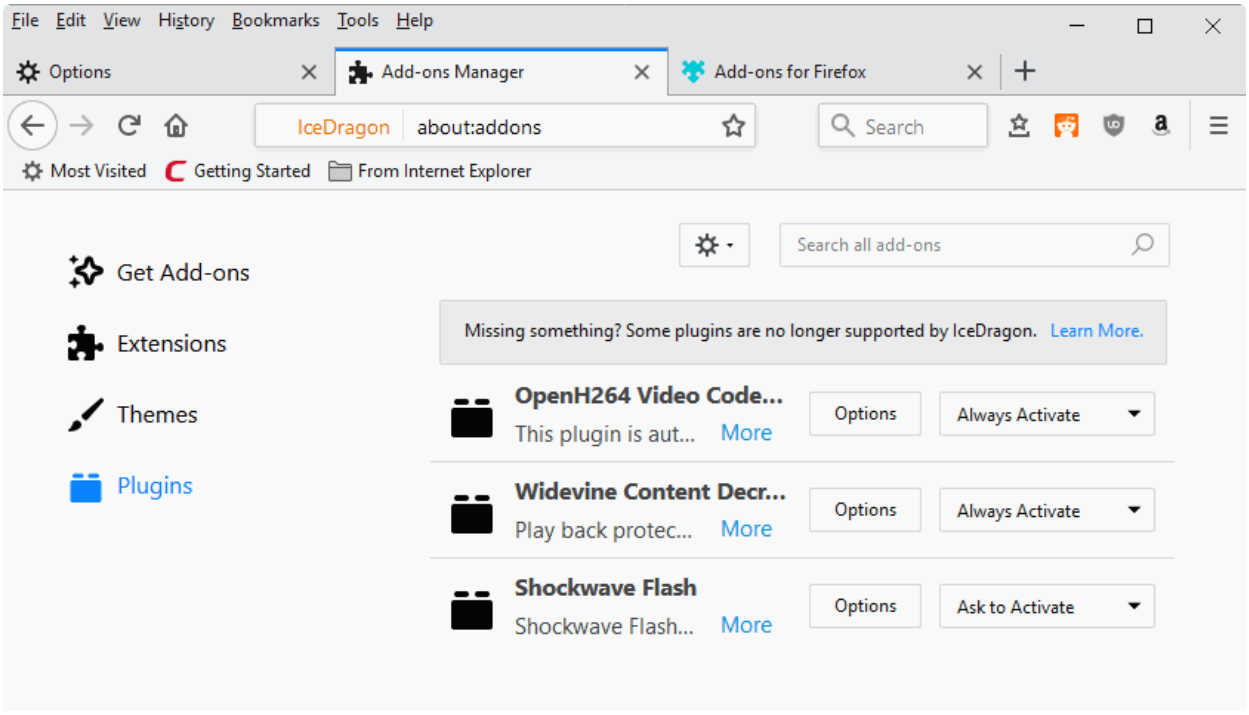
- Plugins to handle these formats of data are usually supplied by third-parties.

Popular plug-ins include:

- Adobe Flash
- Windows Media Player
- Java
- Quicktime
- Adobe Reader
- Silverlight
- Adobe Shockwave

To view installed plug-ins

- Click the hamburger button at top-right
- Select 'Add-ons'
- Click 'Plugins' on the left hand side.



- To see an overview of the plugin, click the 'More' link next to the description of the plugin.
- Select 'Never Activate' from the drop-down beside the plugin to stop the plugin from running.

10. Tools and Other Features

- Comodo IceDragon has a number of built-in tools for specialist tasks. For example, the web page scanning tool, spell checker and so on.
- You can also add as many tools as you like to the browser. See **Install Add-ons** for more details.

Click the following links for more help features:

- **Customize applications for opening different file types**
- **Search within page content**
- **Form autofill**
- **Keyboard and mouse shortcuts for Comodo IceDragon**
- **Manage IceDragon in safe mode**
- **Scan websites for malware and blacklist using Web Inspector**
- **Set up IceDragon sync information**
- **View Digital Rights Management**
- **Improve IceDragon Performance Settings**

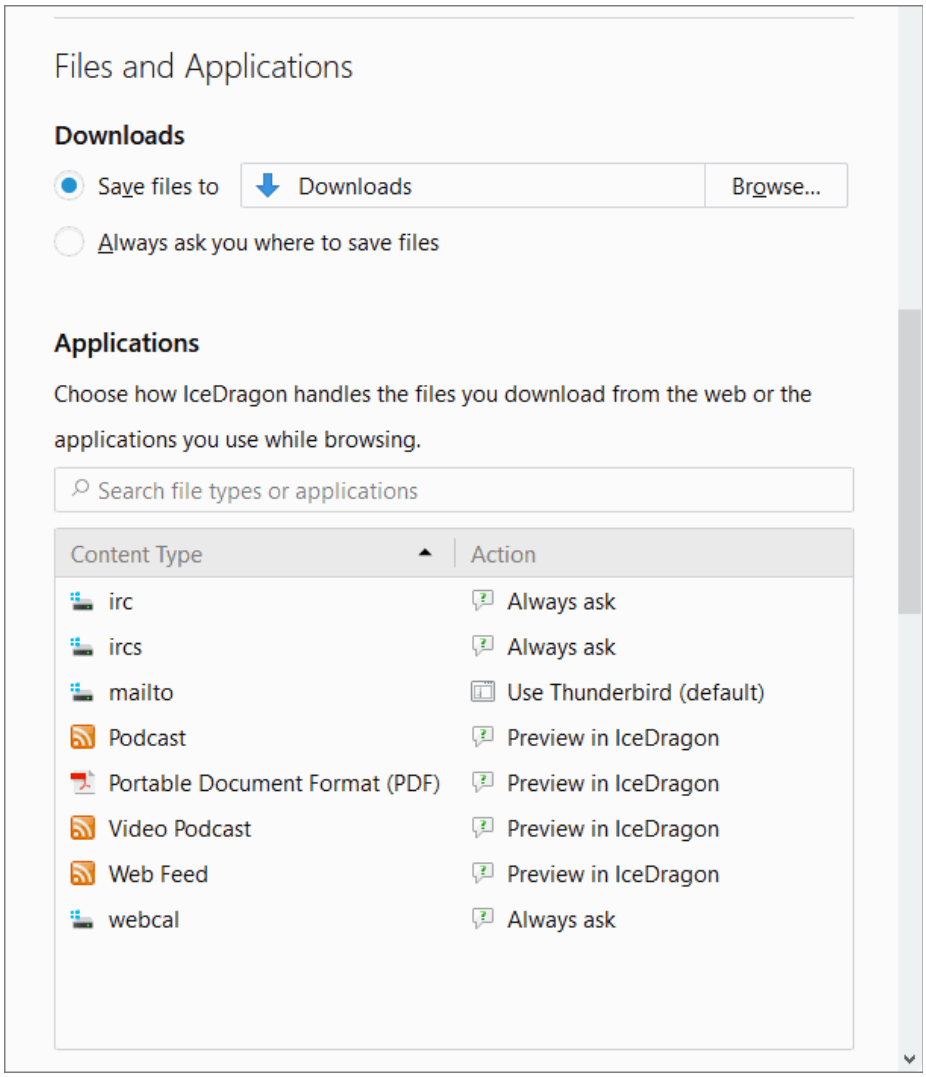
10.1. Customize Applications for Opening Different File Types

- Comodo IceDragon ships with several plug-ins to handle the different types files you may encounter online.
- File types include audio files, video files, play lists, presentations and so on.
- You can add additional plug-ins from third-parties and configure which app should be used to handle a particular type of content.

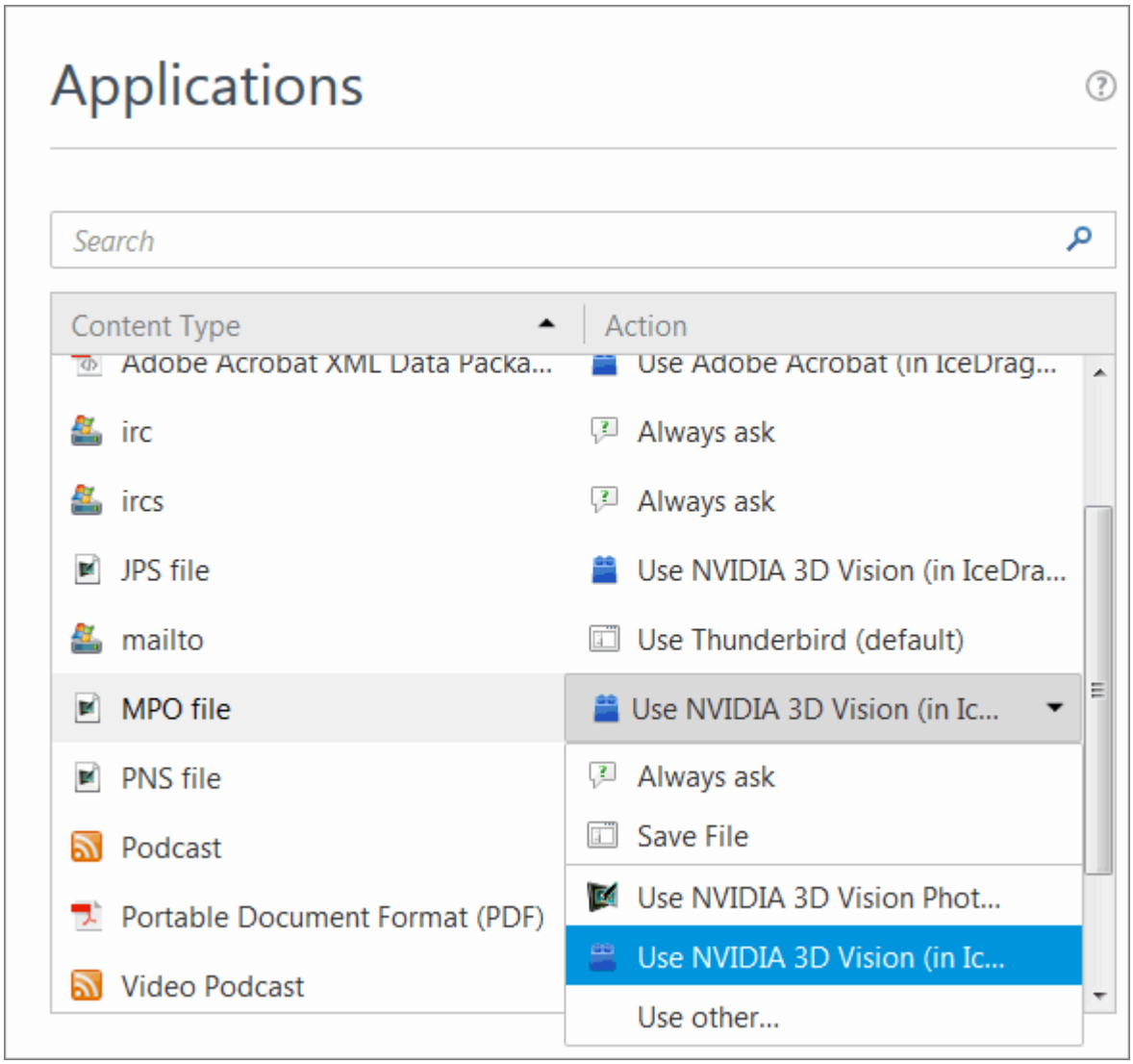
To customize applications

- Click the hamburger/ 'Open Menu' button at the top-right corner.
- Click 'General' > scroll down to 'Files' and Applications
- Select 'Applications' on the left.

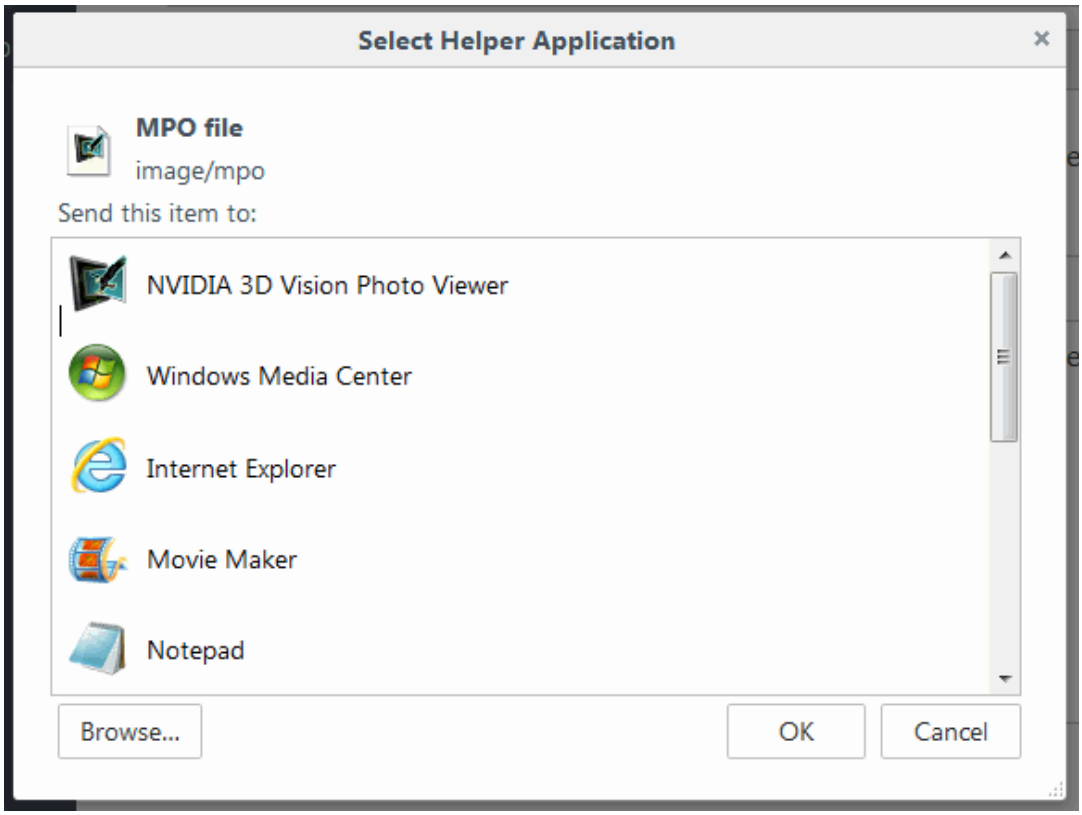
A list of internet content types and their associated plug-in or application will be displayed:



- Locate the content type you wish to modify in the 'Content Type' column.
- Click the drop-down in the 'Action' column to review or change the application or plug-in IceDragon should use to open the content. Plug-ins have the blue building block icon next to them:



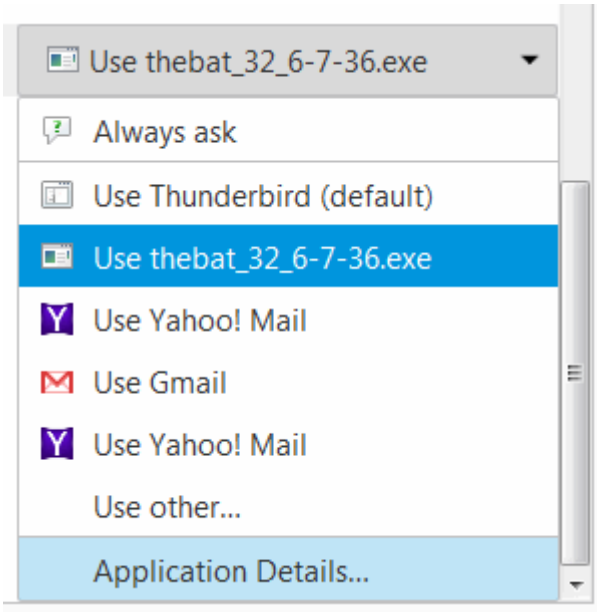
- Select 'Always Ask' if you want select which application to use each type you download the file type.
- Select 'Save File' to automatically save files of that content type.
- Select 'Application Details' to view more information about the application prior to your making a decision.
- Select 'Use Other' to specify a different application which should be used to open files of that content type. A list of applications installed on your system will be displayed:



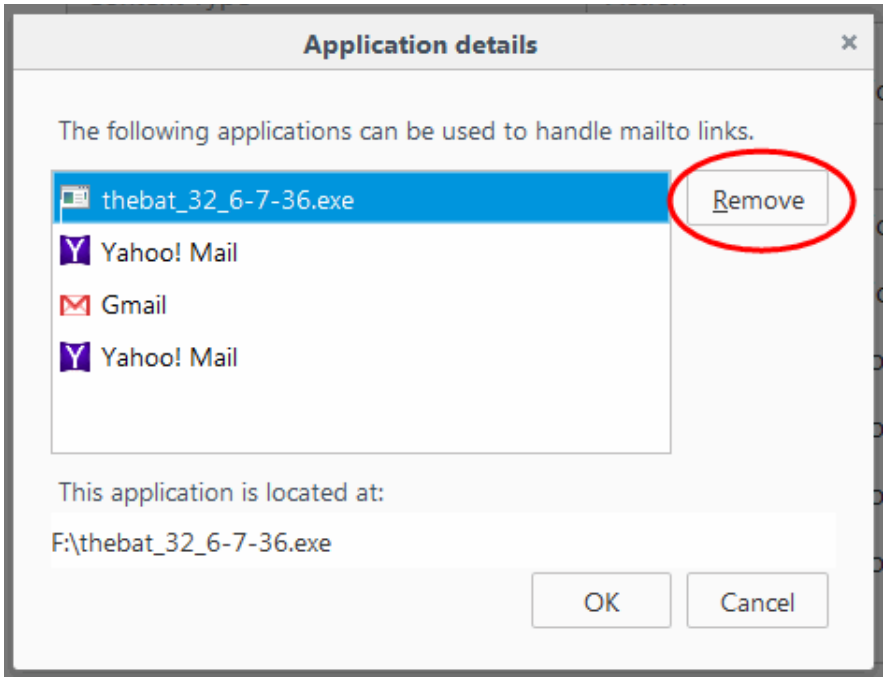
- Select the application from the 'Select Helper Application' dialog and click 'OK'.
- Click the 'Browse...' button to locate you application if it is not listed in the dialog.

To remove a custom application from the list in the drop-down

- Click the 'Action' drop-down and select 'Application Details':



- This will open a list of applications that are capable of opening the content type. Select the application you no longer wish to use and click 'Remove'.



- Click 'OK'.

10.2. Search within Page Content

The 'Find' features lets you search for a specific word or phrase in the web-page you are viewing. You can also configure the browser to launch an auto-search when you start typing a keyword or phrase.

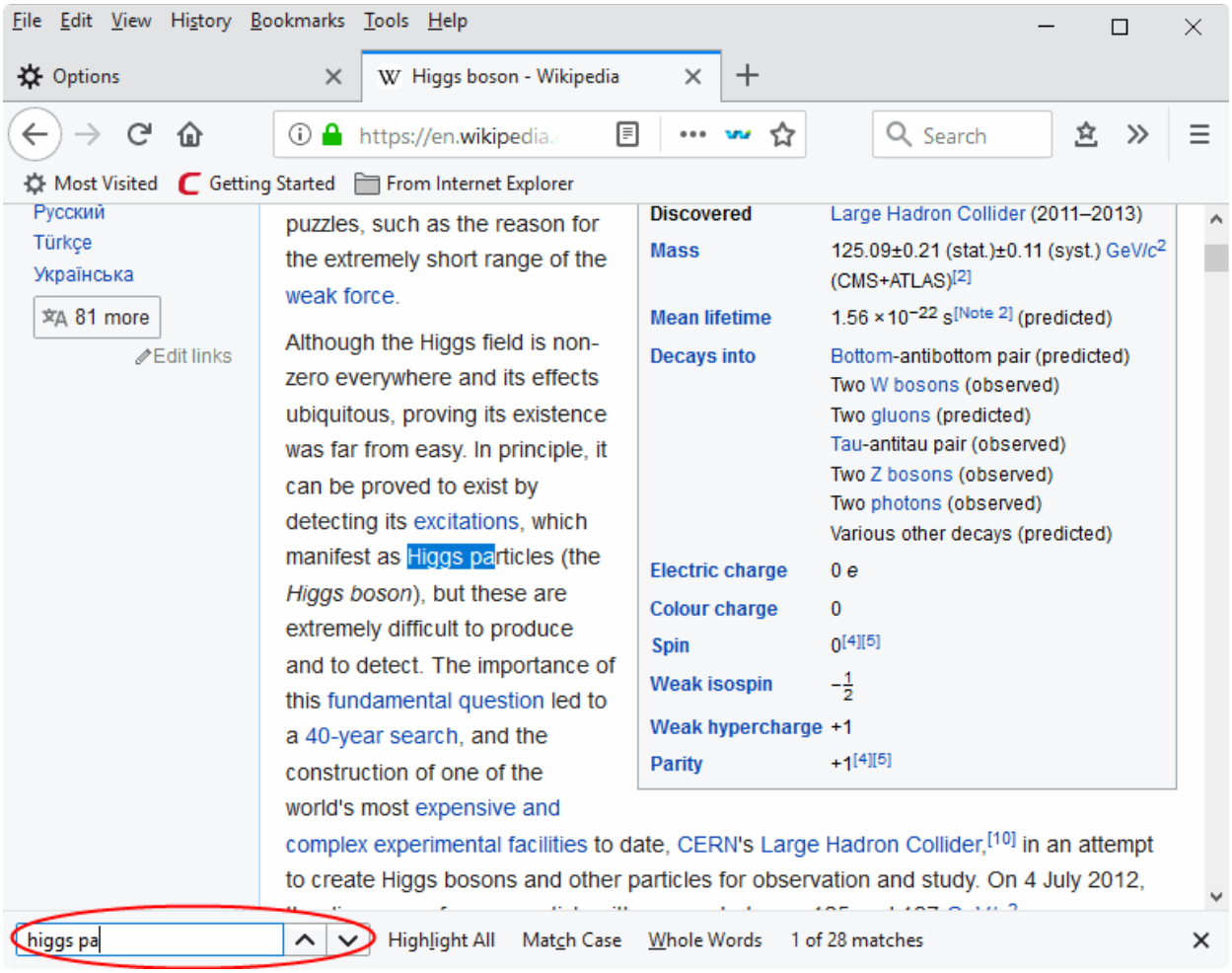
Click the following links for more help with:

- **Search using the 'Find' feature**
- **Launch auto-search**

Search using the 'Find' feature

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Click 'Find' or press Ctrl+F on your keyboard
- Type your keyword/phrase in the search field at the bottom-left of the window

The first occurrence of the keyword in the page will be shown highlighted in green.



- To search for successive occurrences, click 'Next'.
- To highlight all occurrences, click 'Highlight all'.
- Select 'Match case' to search for instances of the keyword that use the same case (upper and lower case) as the characters you enter.

Launch Auto-search

To start an auto-search for the browser when you start typing a keyword, you need to configure the security settings accordingly.

- Click the hamburger/ 'Open Menu' button at the top-right corner.
- Click 'Options' > 'select 'General' tab.
- Check the 'Search for text when you start typing' box under the 'Browsing'.

10.3. Form Autofill

Comodo IceDragon can save the information you enter into order forms and login screens. When you visit the same form in future, just click on a blank field to see all the entries you made previously.

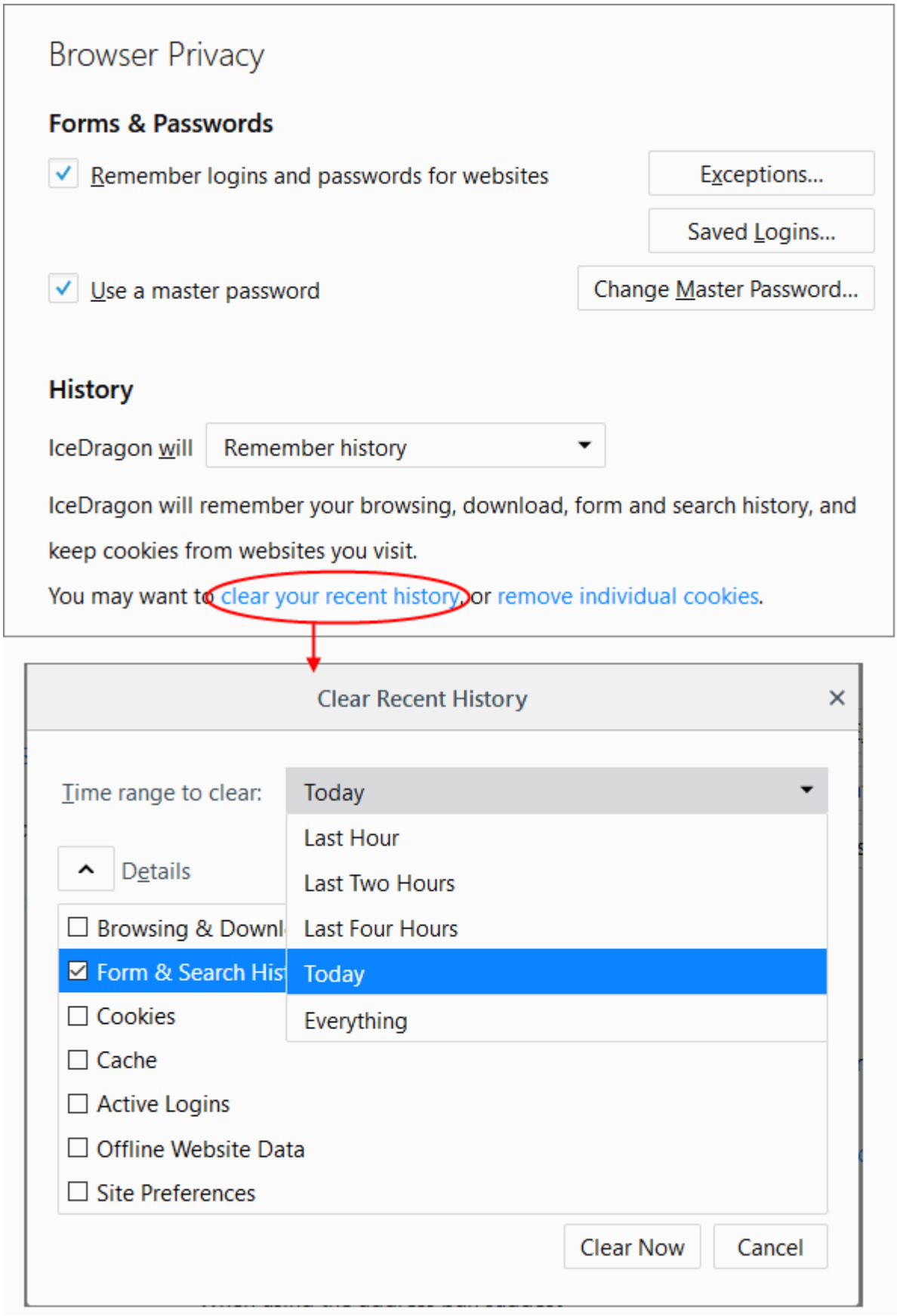
The following explains more about form auto-fill features:

- **Delete all stored form entries**
- **Delete individual entries**
- **Configure form history**

Delete all stored form entries

- Click the hamburger/ 'Open Menu' button at top-right
- Select 'Library' > 'History'

  OR
- Select 'Options' > 'Privacy and Security' > 'Browser Privacy'
- Click 'Clear Recent History' in the 'History' section.



- Click the 'Details' arrow to select the type of information to clear
- Make sure 'Form & Search History' is selected
- Click the time range to delete the history details in the 'Time range to clear' drop-down

- Click 'Clear Now'

Delete individual entries

You can remove auto-fill from specific pages or fields while keeping it active on others. This can be useful on shared computers.

- Visit the webpage from which you want to remove previous form entries
- Click on a field that has auto-fill suggestions. All previous entries will be displayed in a drop-down
- Use the up and down arrows on your keyboard to highlight the entry you want to remove and press 'Delete'
- Repeat the process if you need to delete multiple entries.

Configure the browser for form entries

You can configure IceDragon to whether or not to remember the form entries as per your choice

- Click the hamburger/ 'Open Menu' button at the top-right
- Select 'Options' > 'Select 'Privacy and Security' > 'History'
- In the 'IceDragon will' drop-down, select 'Use custom settings for history'
- Select or deselect 'Remember search and form history' as required

10.4. Keyboard and Mouse Shortcuts

You can access and execute many IceDragon features and commands through keyboard and mouse shortcuts.

Click the links below to jump to the section you would like to learn more about:

- **Mouse Shortcuts**
- **Keyboard Shortcuts**
  - **Navigate Through Webpages**
  - **View , Print and Save Current Page**
  - **Edit Options**
  - **Search Options**
  - **Windows and Tabs**
  - **View History**
  - **Bookmark Options**
  - **Tools**
  - **Miscellaneous**
  - **Audio/Video Shortcuts**
  - **PDF Viewer Shortcuts**

Mouse Shortcuts

Command	Shortcut
Back	Shift+Scroll Down
Forward	Shift+Scroll up

Zoom In	Ctrl+Scroll up
Zoom Out	Ctrl+Scroll down
Close Tab	Middle-click on Tab
Open link in new Tab	Middle-click on Link
New Tab	Double-Click on Tab Bar
Open in Background tab*	Ctrl+Left-click link Middle-click link
Open in Foreground tab*	Ctrl+Shift+Left-click Shift+Middle-click
Open in New Window	Shift+Left-click link
Copy Tab or Bookmark	Ctrl+Drag tab
Reload (override cache)	Shift+Reload button
Save Page As	Alt+Left-click
Scroll line by line	Alt+Scroll

* 'These shortcuts will work only if 'When I open a link in a new tab, switch to it immediately' is enabled in 'Options' > 'General' > 'Tabs'.

Keyboard Shortcuts

Click the links below to jump to the section you would like to learn more about:

- **Navigate Through Webpages**
- **View , Print and Save Current Page**
- **Edit Options**
- **Search Options**
- **Windows and Tabs**
- **View History**
- **Bookmark Options**
- **Tools**
- **Miscellaneous**
- **Audio/Video Shortcuts**
- **PDF Viewer Shortcuts**

Navigate Through Webpages	
Command	**Shortcut**
Back	Alt + left arrow Backspace
Forward	Alt + right arrow

	Shift + Backspace
Home	Alt + Home
Open file	Ctrl + O
Reload	F5 Ctrl + R
Reload (Override cache)	Ctrl + F5 Ctrl + Shift + R
Stop loading	Esc

View, Print and Save Current Page	
Command	**Shortcut**
Go to Bottom of Page	End
Go to Top of Page	Home
Move to Next Frame	F6
Move to Previous Frame	Shift + F6
Print	Ctrl + P
Save Page As	Ctrl + S
Find	Ctrl + F
Zoom In	Ctrl + +
Zoom Out	Ctrl + -
Zoom Reset	Ctrl + 0

Edit Options	
Command	**Shortcut**
Copy	Ctrl + C
Cut	Ctrl + X
Delete	Del
Paste	Ctrl + V
Paste (as plain text)	Ctrl + Shift + V
Redo	Ctrl + Y
Select All	Ctrl + A
Undo	Ctrl + Z

Search Options	
Command	**Shortcut**
Find within page	Ctrl + F
Find Again	F3 Ctrl + G
Find Previous	Shift + F3 Ctrl + Shift + G
Quick Find within link-text only	'
Quick Find	/
Close the Find or Quick Find bar	Esc (When Find and Quick Find bar is active)
Search bar - Easily choose your favorite search engine	Ctrl + K
Select or Manage Search Engines	Alt + Up arrow Alt + Down arrow F4 (When Search bar is active)

Windows and Tabs	
Command	**Shortcut**
Close Tab	Ctrl + W Ctrl + F4 These shortcuts will not work for Extensions and Add-Ons tabs
Close Window	Ctrl + Shift + W Alt + F4
Move Foreground Tab to Left	Ctrl + Left arrow Ctrl + Up arrow
Move Foreground Tab to Right	Ctrl + Right arrow Ctrl + Down arrow
Move Foreground Tab to first position	Ctrl + Home
Move Foreground Tab to last position	Ctrl + End
Mute/Unmute Audio	Ctrl + M
New Tab	Ctrl + T
New Window	Ctrl + N
Next Tab	Ctrl + Tab

	Ctrl + Page Down
Open Address in New Tab	Alt + Enter
Previous Tab	Ctrl + Shift + Tab Ctrl + Page Up
Undo Close Tab	Ctrl + Shift + T
Undo Close Window	Ctrl + Shift + N
Select Tab 1 to 8	Ctrl + 1 to 8
Select Last Tab	Ctrl + 9
Tab Groups View	Ctrl + Shift + E
Close Tab Groups View	Esc
Next Tab Group	Ctrl + `
Previous Tab Group	Ctrl + Shift + `

View History	
Command	**Shortcut**
History sidebar	Ctrl + H
Library window (History)	Ctrl + Shift + H
Clear browsing, search and download history	Ctrl + Shift + Del

Bookmark Options	
Command	**Shortcut**
Bookmark All Tabs	Ctrl + Shift + D
Bookmark This Page	Ctrl + D
Bookmarks sidebar	Ctrl + B Ctrl + I
Library window (Bookmarks)	Ctrl + Shift + B

Tools	
Command	**Shortcut**
Downloads	Ctrl + J
Add-ons	Ctrl + Shift + A
Toggle Developer Tools	F12

Web Console	Ctrl + Shift + K
Inspector	Ctrl + Shift + I
Debugger	Ctrl + Shift + S
Profiler	Shift + F5
Scratchpad	Shift + F4
Style Editor	Shift + F7
Network	Ctrl + Shift + Q
Developer Toolbar	Shift + F2
Responsive Design View	Ctrl + Shift + M
Page Source	Ctrl + U
Error Console	Ctrl + Shift + J
Toggle Private Browsing - Browse the web without storing history, form entries and so on	Ctrl + Shift + P
Remove recent browsing, search and download history	Ctrl + Shift + Del

Miscellaneous	
Command	**Shortcut**
Complete .com Address	Ctrl + Enter
Complete .net Address	Shift + Enter
Complete .org Address	Ctrl + Shift + Enter
Delete Selected Autocomplete Entry	Del
Toggle Full Screen	F11
Toggle Menu Bar activation (when hidden)	Alt F10
Toggle Reader Mode	Ctrl +Alt + R
Show/Hide Add-on Bar	Ctrl + /
Caret Browsing	F7
Select Location Bar	Alt + D Ctrl + L

Audio and Video Shortcuts	
Command	**Shortcut**
Toggle Play / Pause	Space bar
Decrease volume	Down Arrow
Increase volume	Up Arrow
Mute audio	Ctrl + Down Arrow
Unmute audio	Ctrl + Up Arrow
Seek back 15 seconds	Left Arrow
Seek back 10 %	Ctrl + Left Arrow
Seek forward 15 seconds	Right Arrow
Seek forward 10 %	Ctrl + Right Arrow
Seek to the beginning	Home
Seek to the end	End

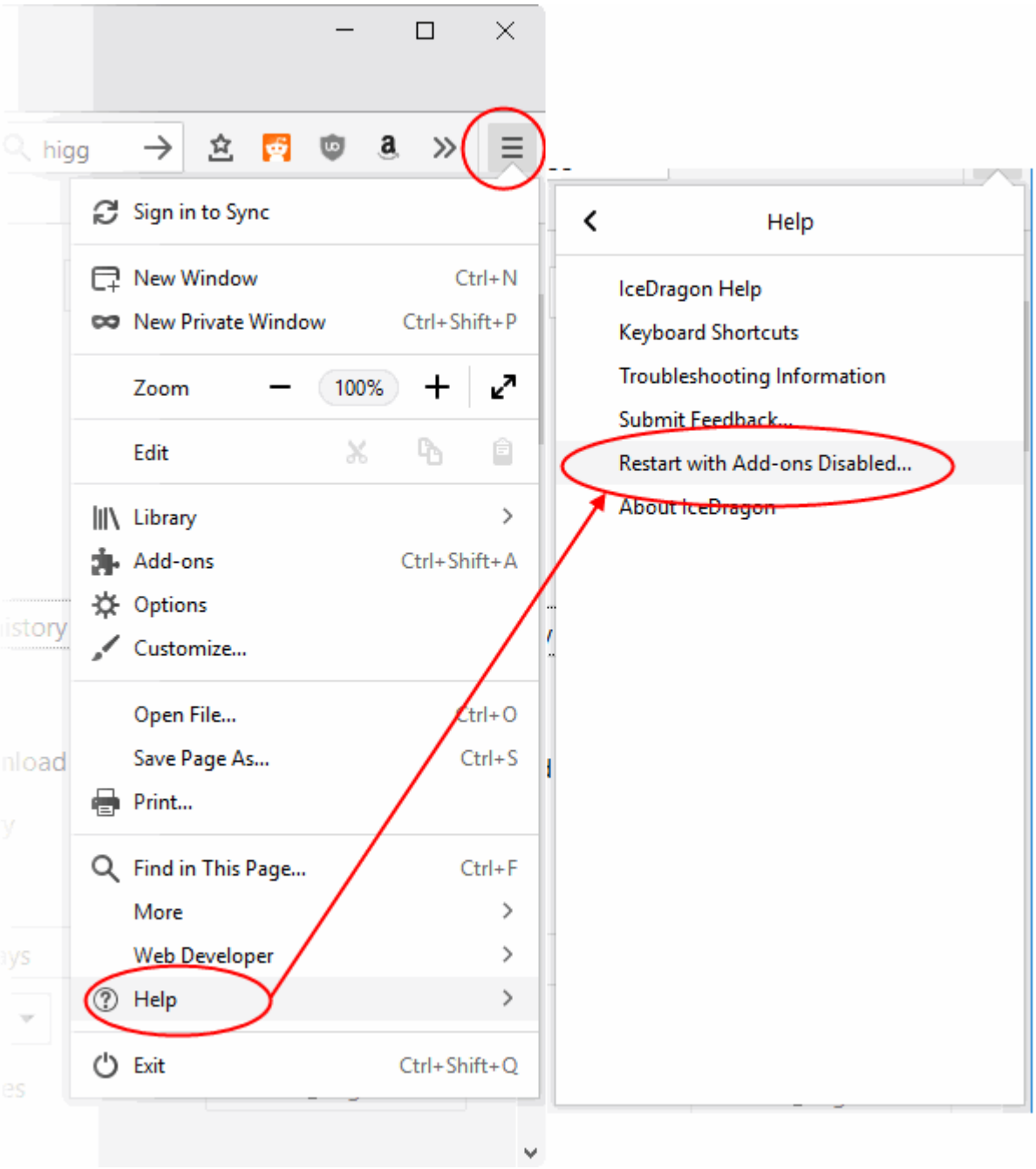
PDF Viewer Shortcuts	
Command	**Shortcut**
Next page	N J Right Arrow
Previous page	P K Left Arrow
Zoom in	Ctrl + +
Zoom out	Ctrl + -
Automatic Zoom	Ctrl + 0
Rotate the document clockwise	R
Rotate counterclockwise	Shift + R
Switch to Presentation Mode	Ctrl + Alt + P
Toggle Hand Tool	H
Activate the Page Number input box	Ctrl + Alt + G

10.5. Manage IceDragon in Safe Mode

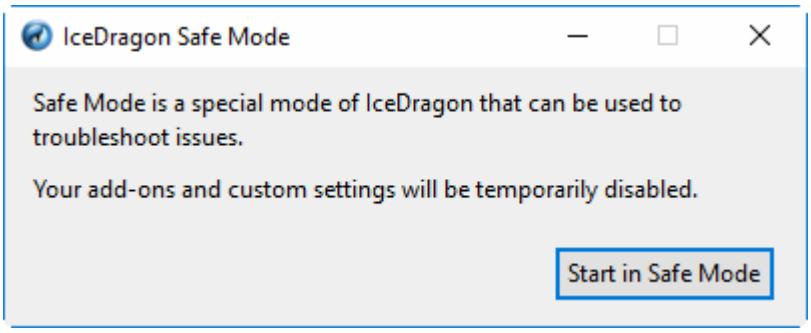
Safe mode lets you troubleshoot issues with all add-ons disabled. For example, if IceDragon is crashing on start-up, then disabling add-ons may fix the problem. You can enable add-ons one at a time until the problematic add-on is found.

To start the browser in Safe mode

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select the help icon on the bottom of the menu
- Select 'Restart with Add-ons Disabled':



- Click 'Restart' in the confirmation dialog.
- Click 'Start in Safe Mode' to temporarily disable all add-ons, extensions, themes, language packs and services.



- To re-enable your add-ons:
  - Click the hamburger menu > 'Add-ons'

    OR
  - Click the hamburger menu > 'Help' > Restart with Add-ons Enabled

10.6. Scan Websites for Malware and Blacklist Using Web Inspector

- Comodo Web Inspector allows you to instantly run an on-demand malware check on any web page.
- Web Inspector tests the target page in a sandbox environment to check whether it contains malware or exhibits malicious behavior.
- This allows you to test the safety of a particular website. Website admins can use the feature to test the safety of their site from a customer's point of view.

The Web Inspector website has the following tabs:

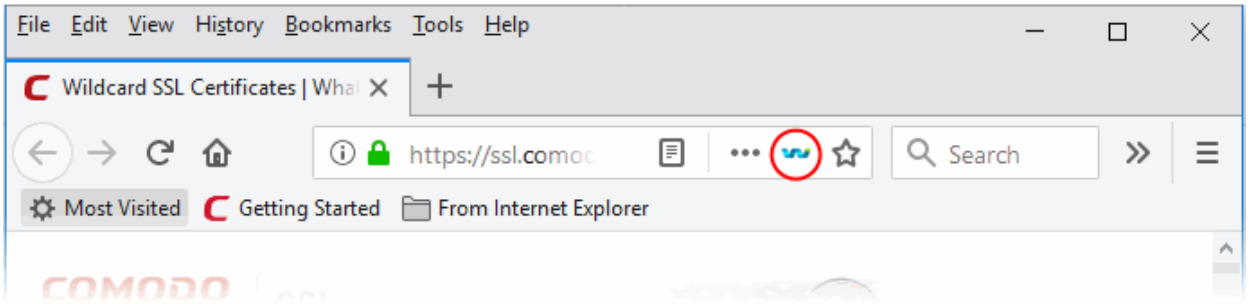
- 'Home' - View all advantages from using Web Inspector, plans and pricing and more
- 'Online Scan' - Type the URL of the page that you want to scan in the blank box and click the 'START THE SCAN' button
- 'Detection Technologies' - View identified malicious code on a web page
- 'Recent Detections' - View the list of unsafe sites that Web Inspector has scanned in the last 48 hours and detected as malicious
- Click 'Login' to enter your Web Inspector account
- Click 'FAQ' at the bottom right to know more about Web Inspector
- Click 'Support ' at the bottom right to open Comodo support page, a searchable knowledge base and troubleshooter at **https://support.comodo.com**

You scan enables webpages in three ways:

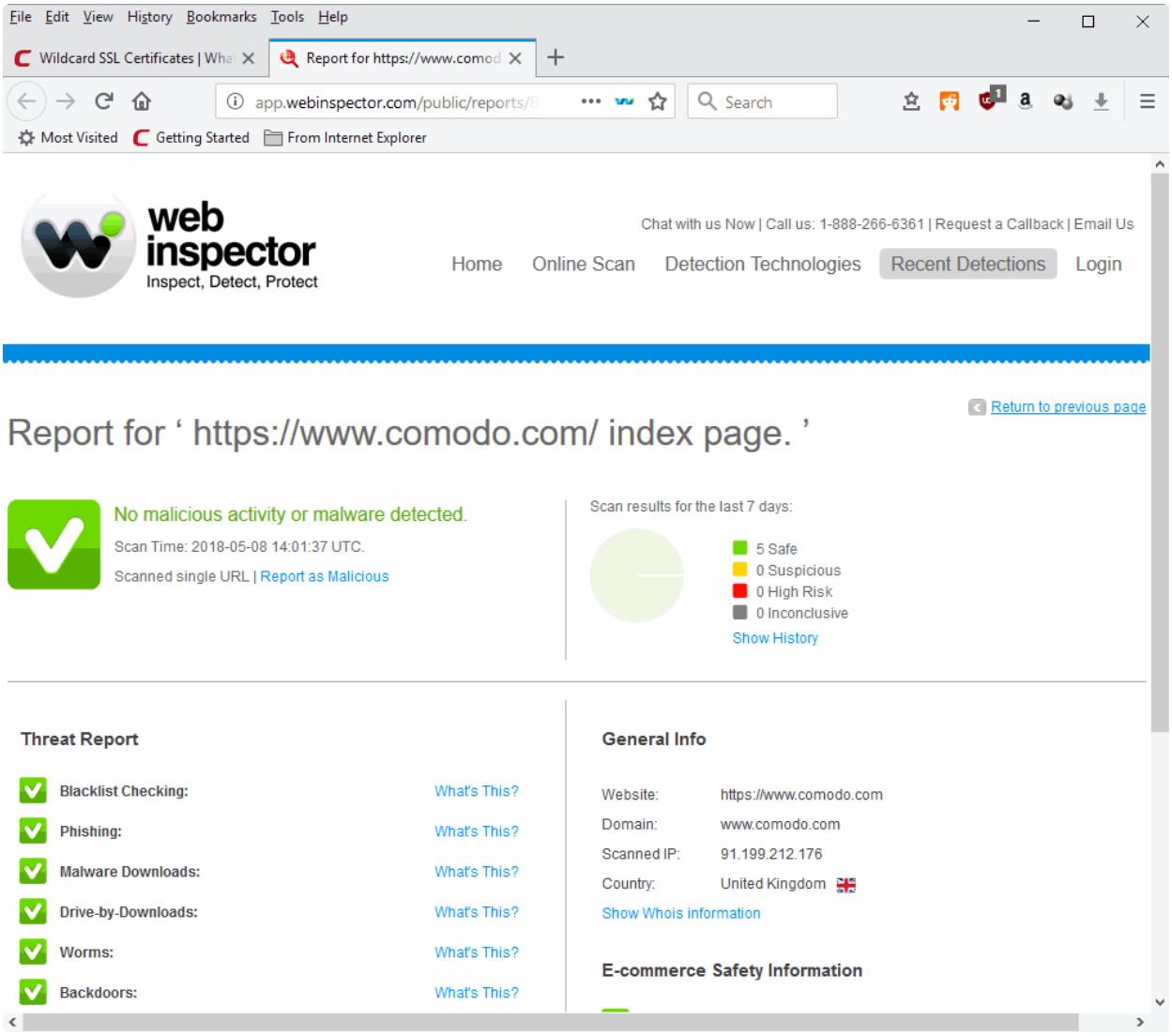
- **Directly scan an open page**
- **Scan a link to a page**
- **Scan a page by entering its url**

To scan the currently open page

- Click the 'Web Inspector' icon at the top right of the address bar when viewing a page.



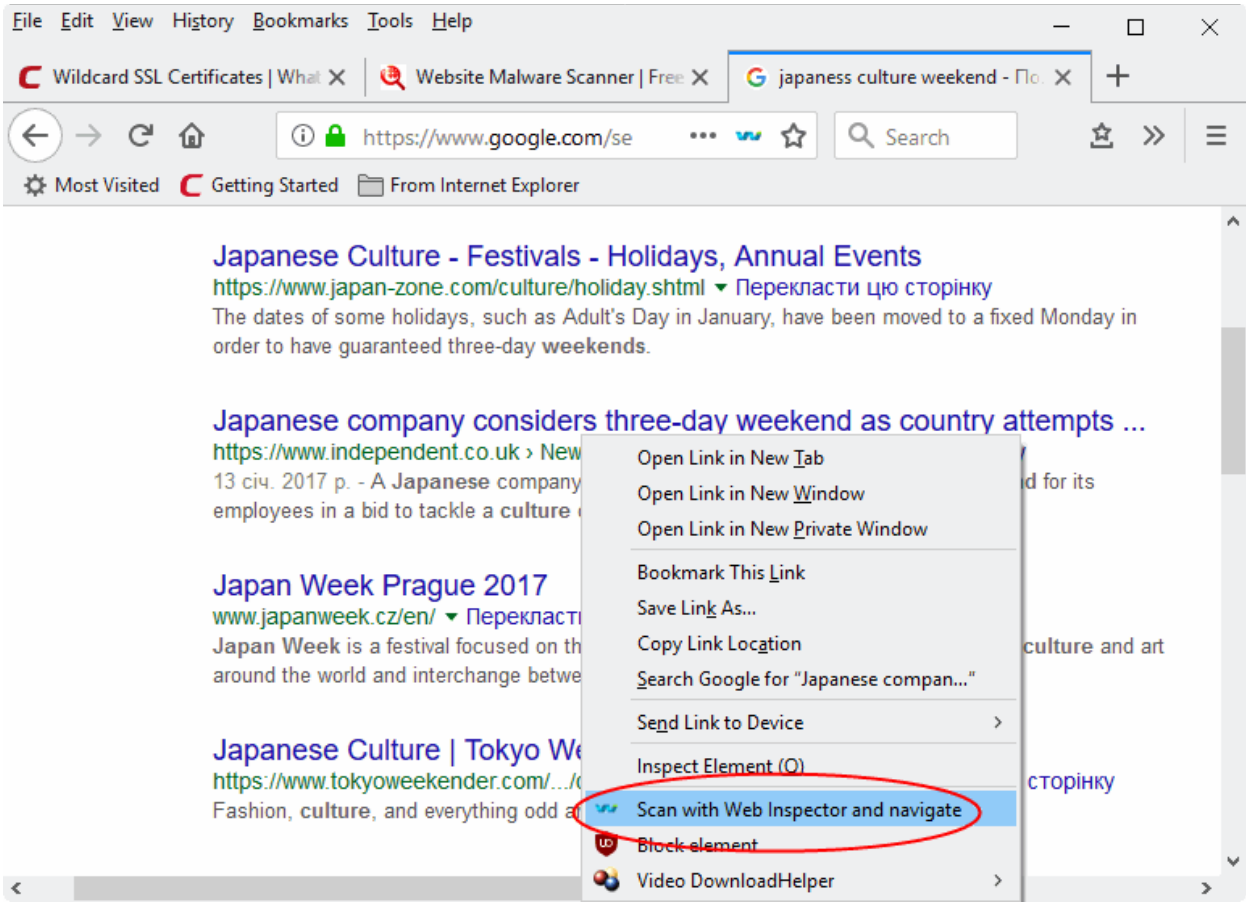
- The web inspector report page will open in the new tab.
- The page will be scanned for viruses and the results will be displayed.
- The results page contains a wealth of statistics about previous tests as well as important domain ownership details.



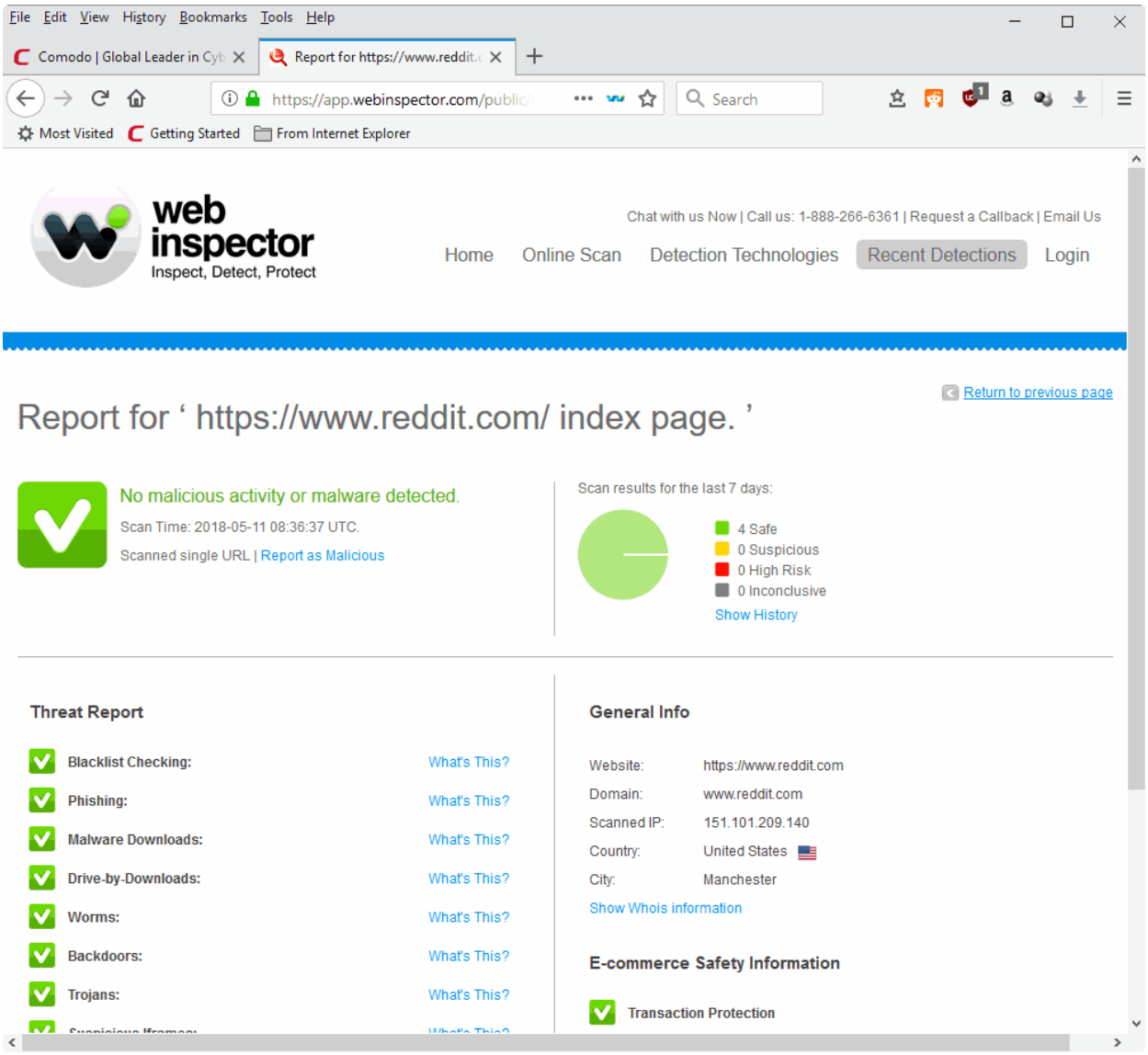
- If the site passes the test and is safe, the message 'No malicious activity or malware detected' is shown.
- If malware is detected on the site or if the domain is listed on a major website black-list of known malicious sites, then you will see the message: 'This is a suspicious page'.
- We advise you not to proceed with your connection to this website.

Scan a link to a page

- Right-click any hyperlink then select 'Scan with Web inspector and navigate' will instruct Web Inspector to visit the target web page and test it for malware.
- This allows you to scan a page before you actually visit it. For example, you can scan the page right from the results of a search engine:

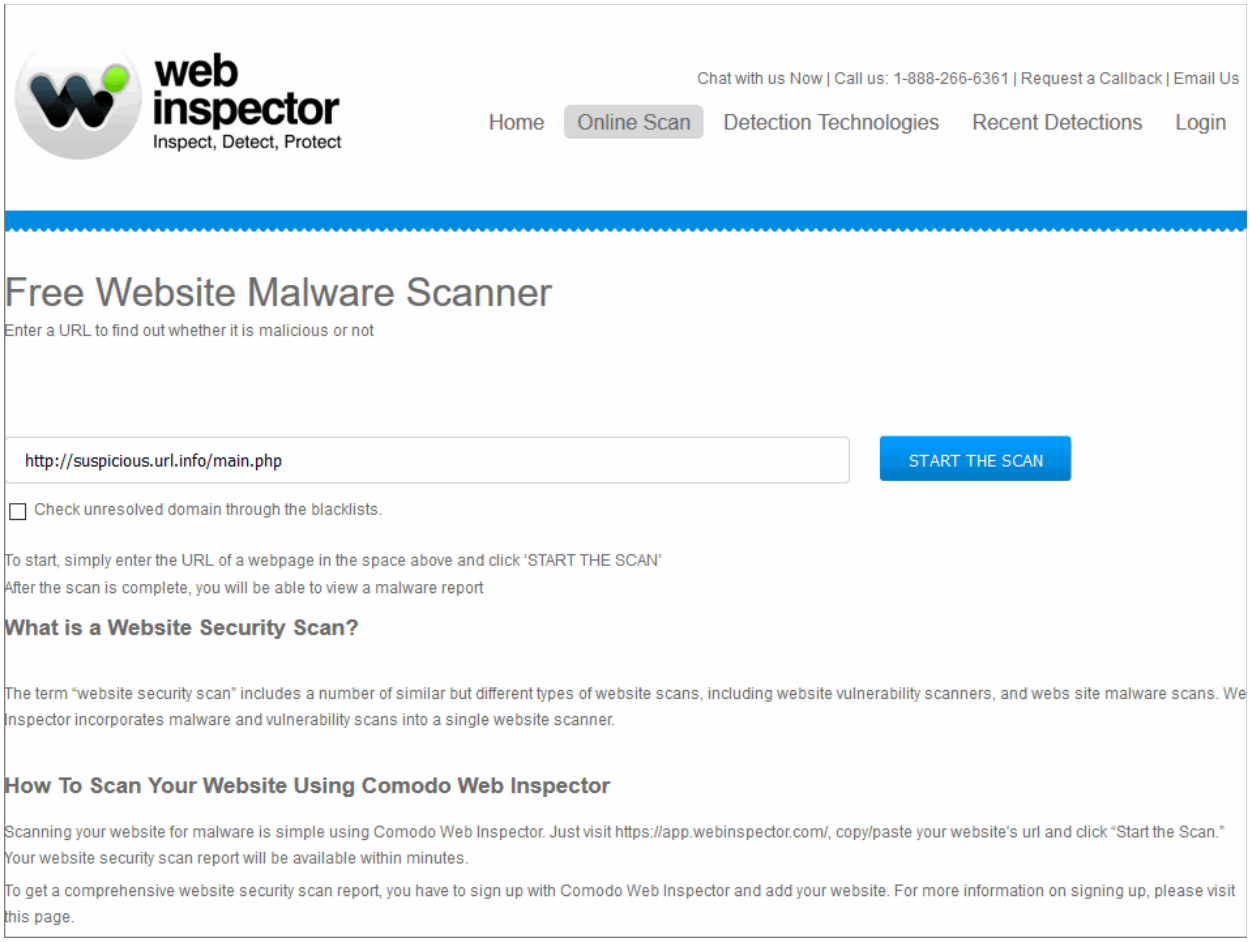


The results of the scan will be shown in a new tab:



Scan a page by typing its URL

- Open a new tab by clicking the '+' button after the last tab on the right
- Enter **http://app.webinspector.com**
- The 'Online Scan' tab will open:



- Type the URL of the page you wish to scan and click 'START THE SCAN'.

The page will be scanned and the results will be displayed in the 'Recent Detections' tab. The statistics on this page also provide a history of scan results for the web page in question.

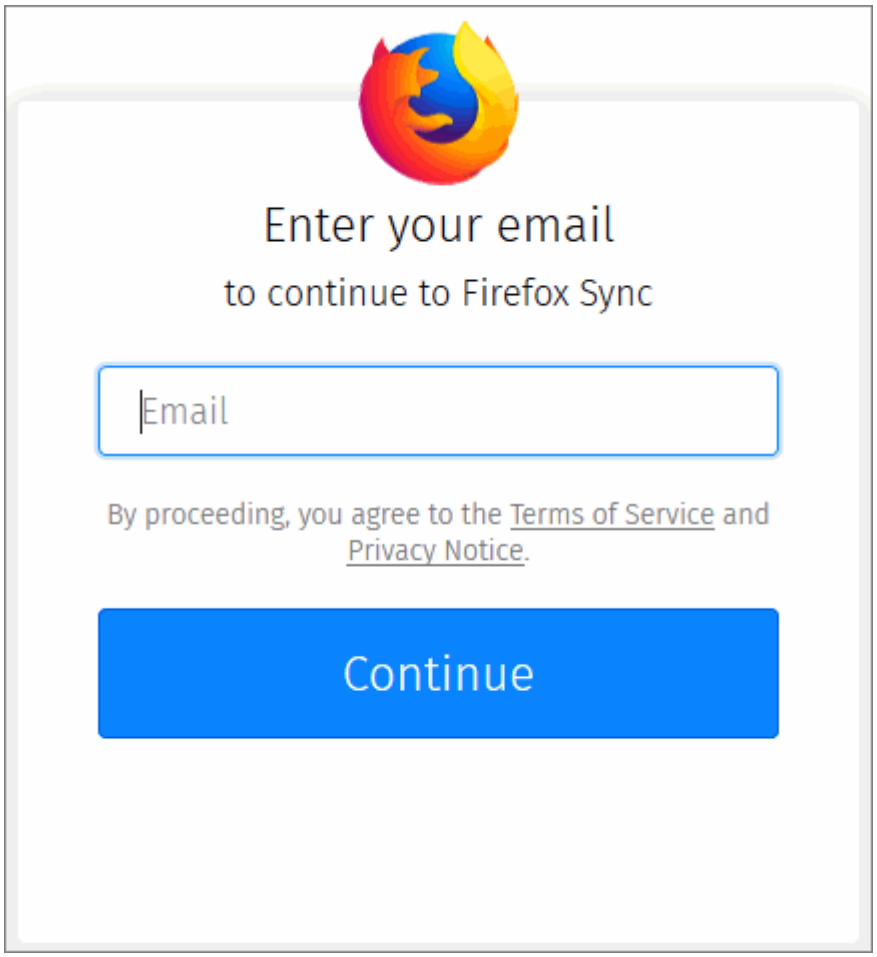
10.7. Set up Comodo IceDragon Sync Information

Synchronizing Ice Dragon with your Firefox account means you can download your Ice Dragon settings to any computer you use. Synchronizing will copy your bookmarks, browsing history, preferences, passwords., form data, add-ons and the last twenty five opened websites.

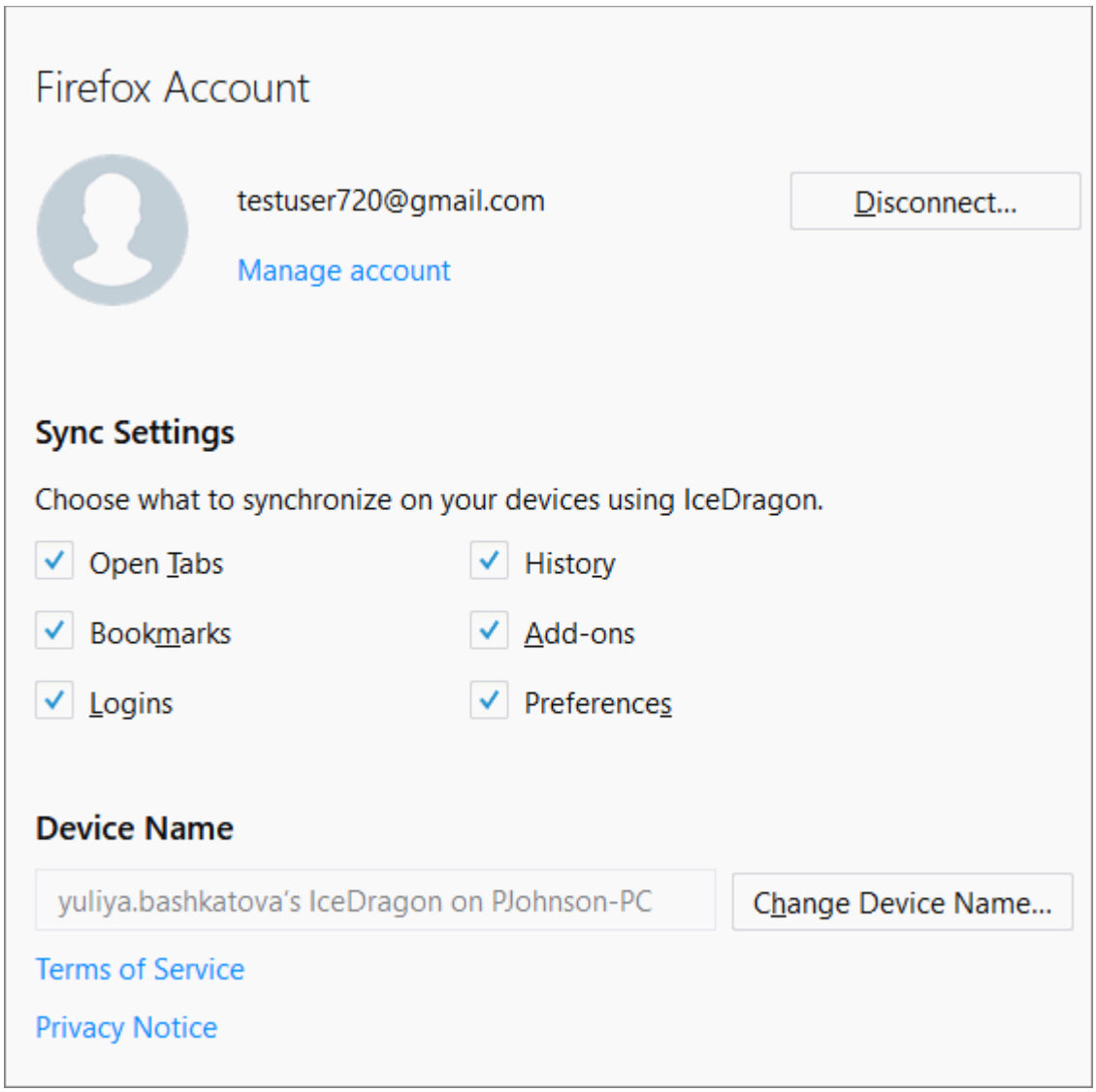
To set up synchronization

- Click the hamburger/ 'Open Menu' at top-right
- Click 'Sign in to Sync'.

  OR
- Select 'Options' then 'Firefox Account'
  - Click 'Create Account' if you do not already have an account.



- Enter your email and password in the text box and click 'Sign in'.
- Click the 'Verify Your Account' message to confirm your sign-in.
- You will receive a confirmation mail to your account email address. Click the link in the mail to verify your sign-in.
- Click 'Confirm sign-in'. The IceDragon will start sync immediately.
- After successfully logging in, the sync settings page will show all items currently synced with your account.
- Please review these settings and deselect items that you do not wish to sync.



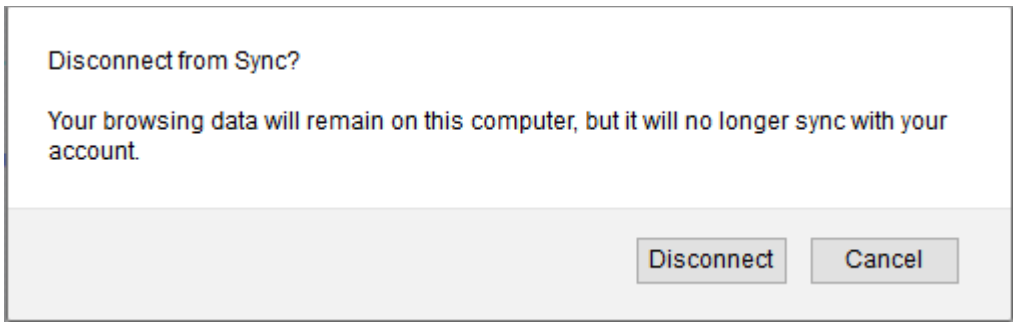
Manage IceDragon Sync information

- Click the hamburger/ 'Open Menu' at the top-right > 'Sign in to Sync'.

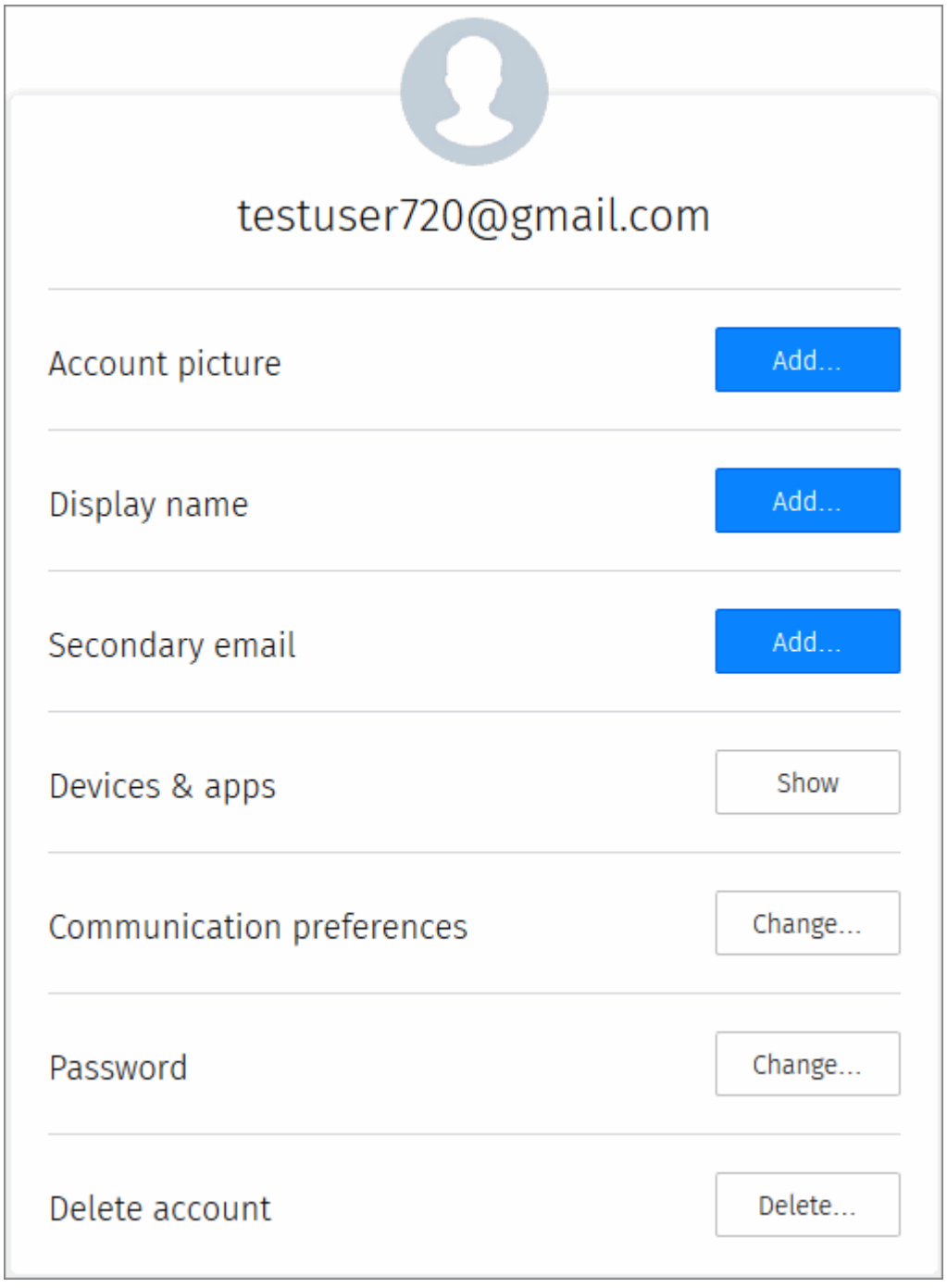
  OR
- Click 'Options'> 'Firefox Account'.

The general interface lets you setup and disconnect from your account

- Click 'Disconnect' to stop syncing. Note: your Google account will retain data that has already been uploaded BUT will not update with any further changes you make.



- Click the 'Manage Account' link to change your account appearance and password and preferences.



- Select items you want to sync across all devices

The 'Device Name' area lets you view and change the name of the device you synced.

- Click 'Change Device Name' to rename a device, then click 'Save'

Change a password

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options'> 'Firefox Account'
- Click the 'Manage Account' link
- Click the 'Change' link beside the 'Password'.

- Type your an old password, then re-type it again and click 'Change'.

Delete an account

- Click the hamburger/ 'Open Menu' at the top-right.
- Click 'Options'> 'Firefox Account'
- Click the 'Manage Account' and select 'Delete account' button.

Reset IceDragon sync every time I close IceDragon

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' then the 'Privacy and Security' tab.
- In the 'History' > IceDragon will:' select 'Use custom settings for history'
- Uncheck 'Clear history when IceDragon closes'

10.8. View Digital Rights Management

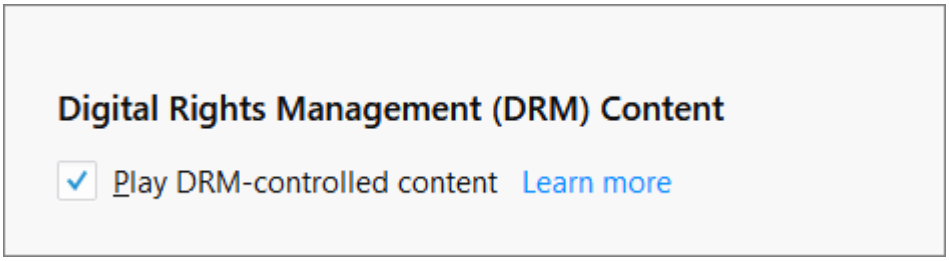
Digital rights management (DRM) allows online video and audio services to protect the content they provide from piracy.

IceDragon implements HTML5 playback of DRM content by first decrypting it with a 'Content Decryption Module' (CDM). IceDragon currently supports Adobe Primetime and Google Widevine CDM systems.

If you opt-out of DRM playback, then all downloaded CDMs will be deleted so you will not be able to play DRM content in future.

To disable DRM playback

- Click the hamburger/ 'Open Menu' at the top-right
- Click 'Options' > 'General'
- Go to the 'Digital Rights Management (DRM) Content'
- Deselect the 'Play DRM-controlled content' checkbox



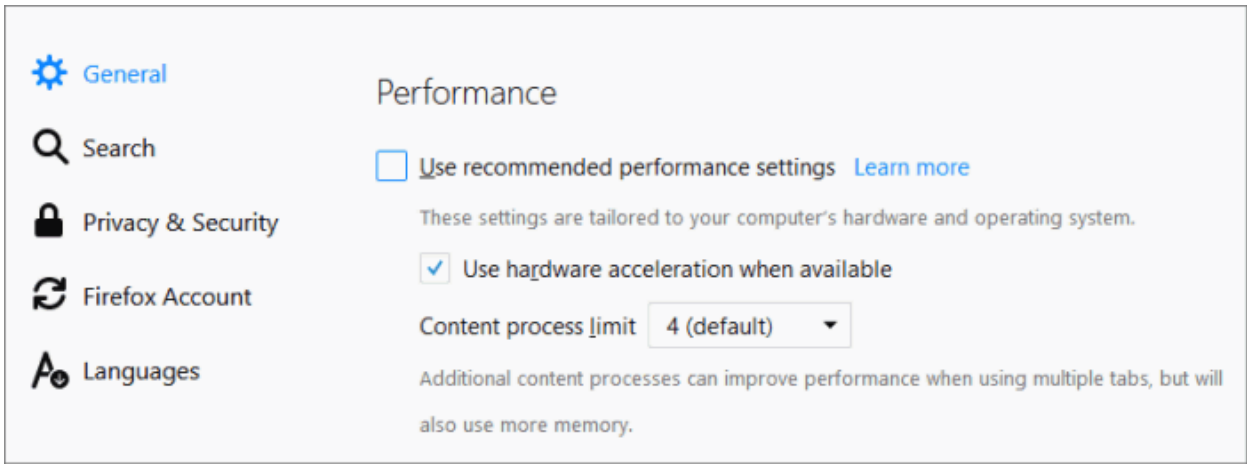
- If sites requires this type of DRM to operate properly, turn DRM playback on again.

10.9. Improve IceDragon Performance Settings

IceDragon allows you to use hardware acceleration to improve video playback. For example, hardware acceleration improves playback on YouTube and 3D Earth view in Google maps.

To configure performance settings

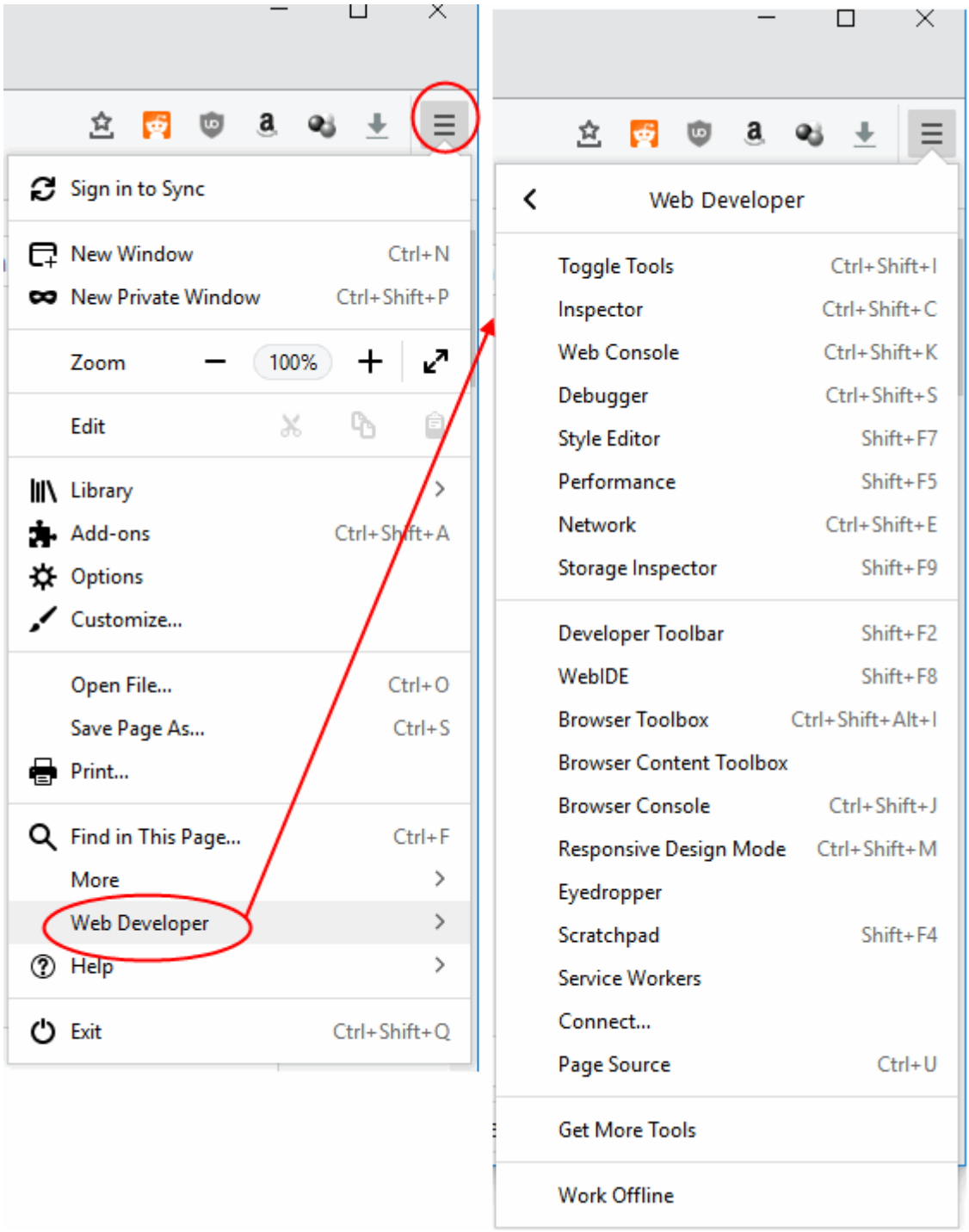
- Click the hamburger/ 'Open Menu' at top-right
- Click 'Options' > 'General'
- Scroll to the 'Performance' section



- **Use hardware acceleration when available** – If selected, Ice Dragon will use the 3d acceleration features of your graphics card to improve video playback. Restart the browser for the settings take effect.
- **Content process limit** – Improve performance by increasing the number of processes assigned to handle video content. Adding more processes will also commit more memory to the task, which could degrade performance in other tasks that are running on your computer.

11. Web Developer Tools

Comodo IceDragon has a number of built-in tools that allow web-devs to developer and test website code. You can use the tools to debug code, run java scripts, view and change styles, find java script related errors and much more.



Click the links below for more help on using developer tools:

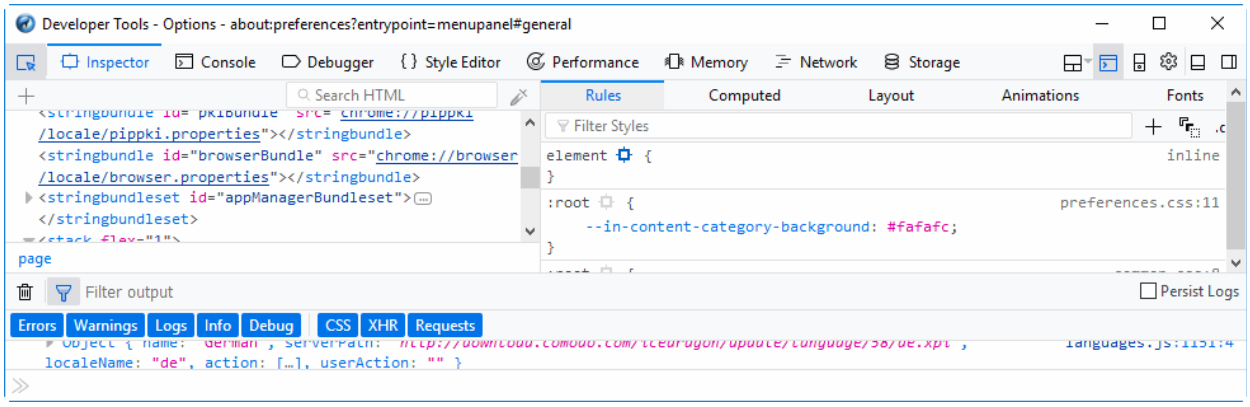
- **Open the Tools console**
- **Inspect Page Elements**
- **Use the Web Console**
- **Remove Inconsistencies with HTML, CSS and Javascript**
- **View and Run Experimental Style Sheets on a Webpage**
- **Improve Web Page/Web Application Performance**
- **Memory Tool**
- **Network Monitoring**

- Use the Developer Toolbar
- Use the WebIDE
- Browser Console
- Responsive Design View
- Eyedropper
- Run Experimental Java Scripts on Page
- View Page Source
- Add More Web Development Tools
- Service Worker
- Connect Remote Device
- Add More Web Development Tools
- Work Offline

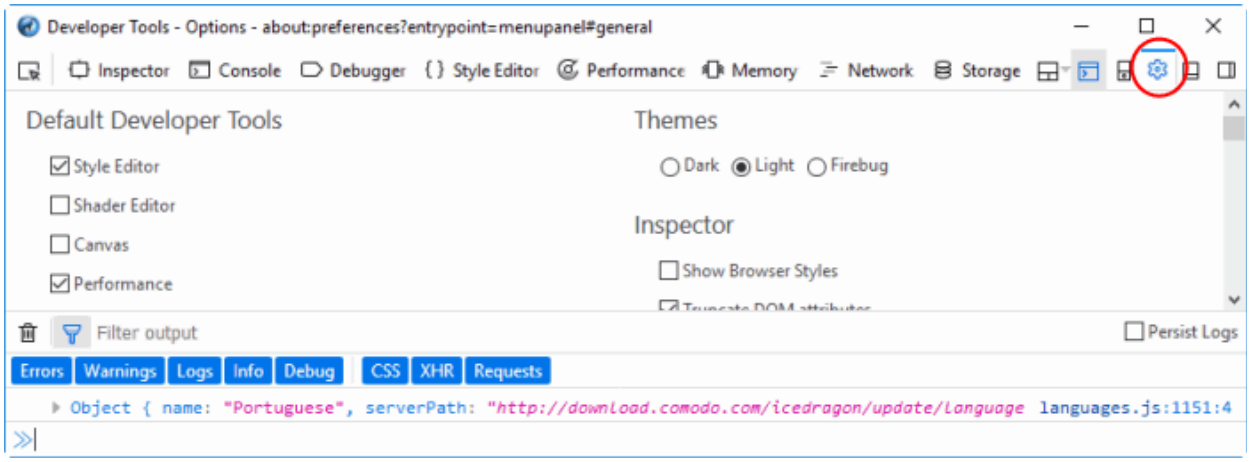
11.1. Open the Tools Console

To access the console interface

- Click the hamburger/ 'Open Menu' at the top-right
- Select ' Web Developer' > 'Toggle Tools'



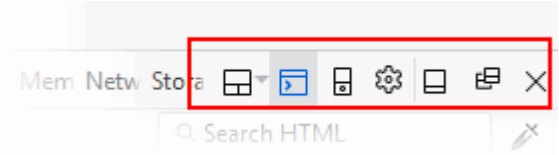
- **Developer Tool - Options** – Click the 'cog' icon on the right to set overall preferences:



- **Default Developer Tools** – Enable or disable tools using the check-boxes.
- **Available Toolbox Buttons** – Choose which tools will be displayed on the toolbar.
- **Theme** - Allows you to switch between a Light and a Dark theme.
- **Inspector**
  - Show browser styles – Determines whether or not the style applied by the browser will be displayed in the Inspector's Rules view
  - Default color unit: drop down – Select the colors will be presented in the inspector. Available:
    - Hex
    - HSL(A)
    - RGB(A)
    - Color Names
- **Web Console -** Enable timestamps - If enables, the console clears the output when you navigate to a new page.
- **Style Editor** – Allows you to view and manage original sources and auto-complete CSS
- **Screenshot Behavior** - Define how Ice Dragon should handle screenshots.
- **Editor Preferences –** Defines which items will be used in developer tools
  - Detect indentation: Auto-indent new lines based on the current indentation
  - Autoclose brackets
  - Indent using spaces
    - Tab size = *2 (By Default)*
    - Keybindings: drop down - Select CodeMirror keybindings or keybindings:
      - Vim
      - Emacs
      - Sublime Text
- **Advanced settings**
  - **Enable Source Maps** – Maps your browser inspector's line numbers to the original source.
  - **Show Gecko platform data** – Display Gecko platform symbols
  - **Disable HTTP Cache (when toolbox is open)** - Allows you to disable session caching
  - **Disable JavaScript** - Loads the current tab with JavaScript disabled
  - **Enable Service Workers over HTTP (when toolbox is open**) – Allows you to service worker registrations from insecure web sites
  - **Enable browser chrome and add-on debugging** - Allows you to use developer tools in the context of the browser itself
  - **Enable remote debugging** - Allows you to debug code running remotely in a different process or on a different device
  - Restart your browser for the settings to take effect.

- **Inspector** – Analyze the layout of a web page and find/fix web page issues. It allows developers to see which elements in the source files (including server-side code) have produced the HTML markup to be rendered in the browser. Page Inspector also lets you modify CSS properties and DOM element attributes to see the changes reflected immediately in the browser.
- **Web Console** - Logged information and other error messages. Allows developers to upload/download files to/from server, edit text files directly on a server and much more.
- **Debugger -** Finds errors in other programs. A debugger allows a web developers to stop a program at any point and examine and change the values of variables.

- **Style Editor** - Allows developers to edit a style sheet to apply a style of your own choice to required elements.
- **Performance** - Allows developers to find and eliminate bottlenecks in your JavaScript code.
- **Memory** – Take a snapshot of the current page memory.
- **Network** - List all network requests made while loading the page.
- Other tools on the web developer toolbar are available:



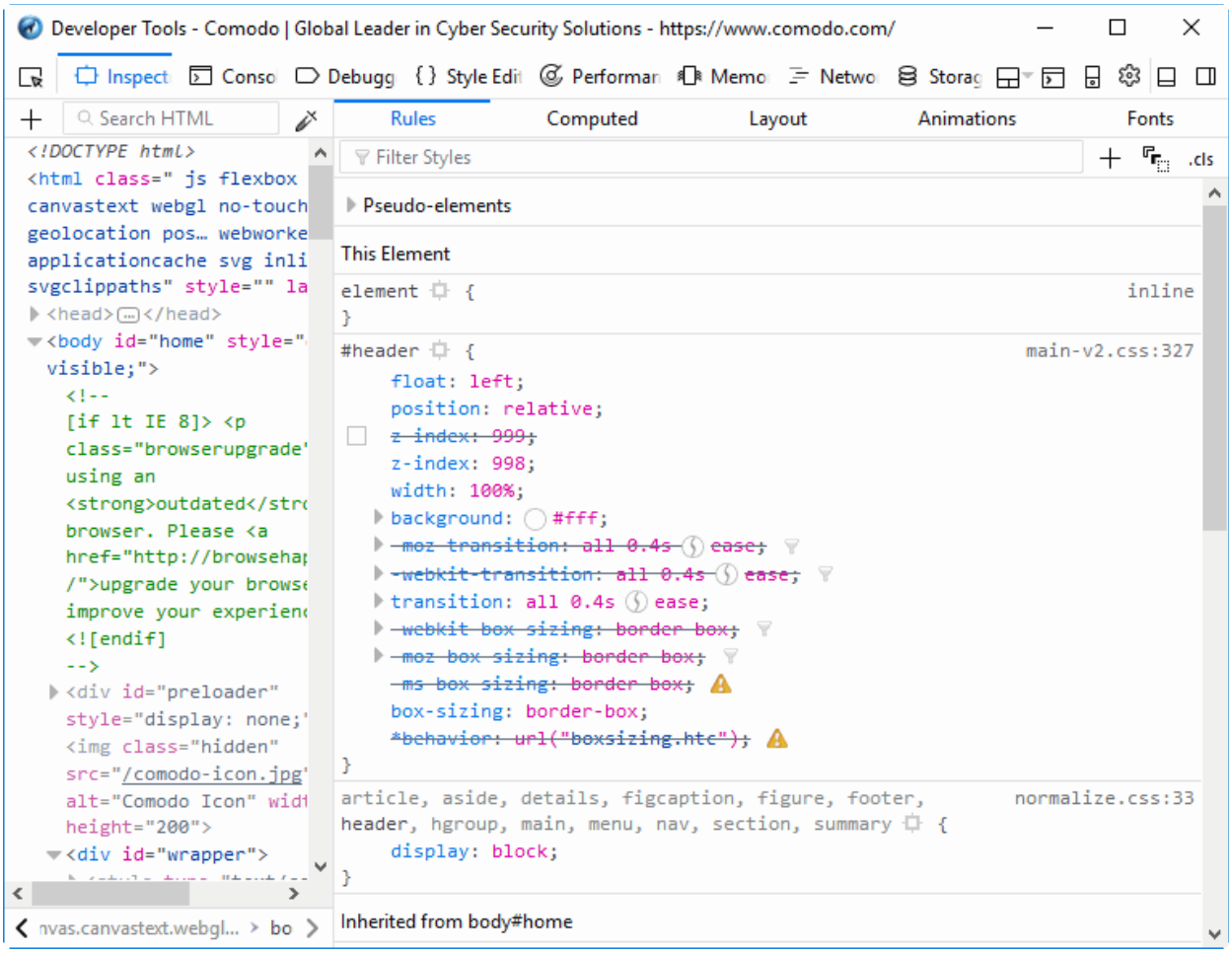
  - 'Select an iframe as the currently targeted document'. You can enable/disable it from the developer settings by clicking the cog icon at far top right. Lists all nested frames in the file and in the main document.
  - Toggle split console – Displays an extra console underneath the web developer tools interface.
  - **Responsive Design Mode** – Makes it easy to see how your designs will look on different sized screens such as mobile phones or tablets. Use the resize handle at the lower right of the content area to change the size of the content area.
- **Dock to side of browser window / Dock to bottom of browser window** - Move and pin the panel to the side or top of the browser as per your preference.
- **Show in separate window** – Opens a separate web developer tools.
- Click on the 'X' at the far right to close the tool bar.

11.2. Inspect Page Elements

The 'Inspector' tool allows web developers to analyze the layout and structure of a web page.

To inspect a page

- Open the web-page you want to inspect
- Click the hamburger/ 'Open Menu' at top-right
- Select 'Web Developer' > 'Inspector'
- OR
- Right-click on the page and select 'Inspect Element' from the context sensitive menu. You can right-click on specific items on the page to open the inspector at the relevant place.



- Move your mouse cursor over the page content to view information about the content in the inspector.
- Click on a page element if you want to work on it.

The 'Inspector' consists of two parts: HTML pane and CSS pane.

All parent elements are on the the left and child elements on the right.

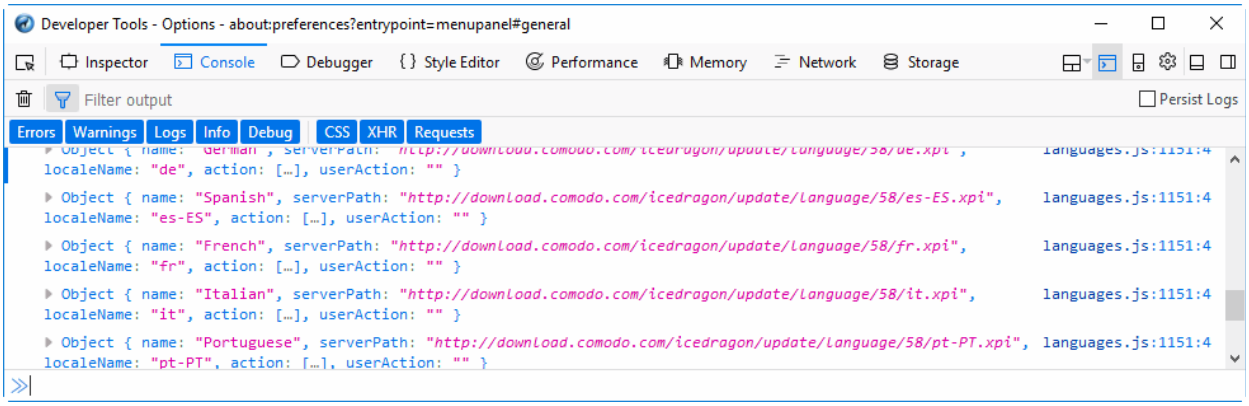
- The left side pane is HTML pane – The top-level element in the hierarchy of all nested elements, is at the left of the toolbar.
  - Allows you to view the HTML code of the selected element.
  - Use the arrow keys in the left and right to navigate to the elements in the tool bar.
- The right side pane is for CSS and divided into 5 elements:
  - Rules - Show all the rules that apply to the selected elements. The most recently applied styles are listed first. Styles are grouped by source. The 'inline' group lists styles applied using the HTML *style* attribute.
  - Computed – Indicates the computed CSS for the specific element.
    - Box Model' show the total space taken by the element on the page. It provides information about the currently selected page element's layout: the outside numbers displays an amount of padding is on each side of the element. The numbers in squares on the borders displays the border of each side. The margins around the element and the center, is the size of the element's content.
  - Layout – Apply a grid overlay while inspecting the element.
  - Animations - Animations to specific element.
  - Fonts – Displays all the fonts in use by the selected element.

11.3. Use the Web Console

The web console is a very useful tool for web developers which displays logged information and other error messages. It also allows developers to check Javascript and acts as a debugging tool for web applications or web sites.

To access Web Console

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Web Console'.



- Use the 'Position' drop-down menu beside the box to place the Web Console above or below.
- Use the 'Filter output' box to search for particular item(s) in the list.

The Web Console displays messages about Network requests, CSS, JavaScript, Logs.

- **Errors / Warnings** – View all errors related to the current page. This includes HTML/CSS, javascript and other warnings and messages. This is useful for web developers to check the pages that they have developed.
- **Logs –** These are outputs of JavaScript code executed on the console object in IceDragon.
- **Network Request** – Displays messages about network requests generated by your web browser. Click on network request log to view full its details such as request headers and response headers.
- **CSS Messages** – IceDragon generates these messages for CSS errors that occurred while loading a web page.
- **JavaScript Messages** - IceDragon generates these messages for JavaScript errors that occurred while rendering a JavaScript code.
- **Security Messages** - IceDragon generates these messages for security warnings and errors that occurred during runtime.
- **XHR (xmlHttpRequest)** – Shows data which has been transferred via HTTP. Uses for XML and Json.

Messages that are generated multiple times are listed only once with an indication in the right displaying how many times the message was output in the Web Console.

You can choose what information should be displayed in the log area by selecting the respective item, that is, Network, CSS, JS, Security and Logging. You can further filter them from the drop-down menu to display messages about errors, warnings, info and log.

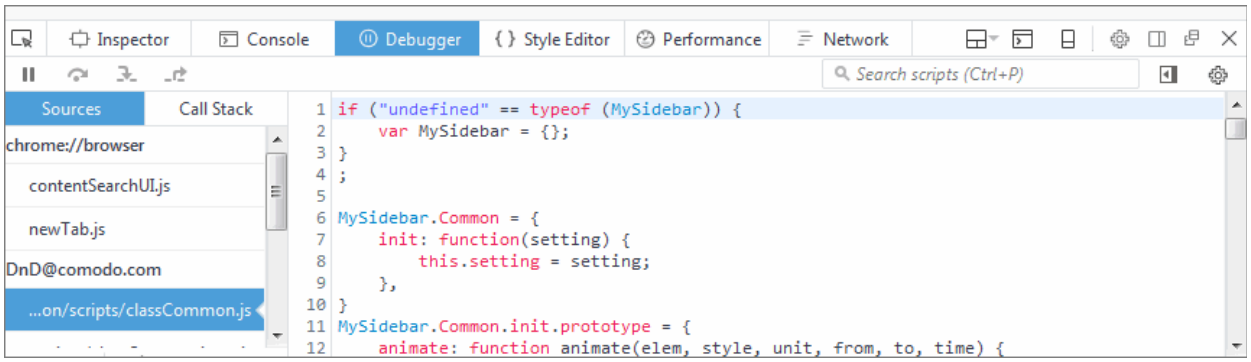
Below the log information area, a command line box allows you to execute JavaScript in real-time.

11.4. Remove Inconsistencies with HTML, CSS and Javascript

The debugger feature lets you analyze a web page's code line by line.

To open debugger element tool

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' then 'Debugger'



The debugger toolbar consists of:

- **Pause/Resume** - Pauses or resumes execution of the script you're debugging.
- **Step Over** - Steps across the current line of JavaScript code.
- **Step Into** - Steps into the function call on the current line of JavaScript code.
- **Step Out** - Runs the script until the current function exits.
- **Script Chooser** - This pop-up menu lets you select one of the running scripts in order to read its code, set breakpoints, and so forth.
- **Script Filter** - The script filter (which doubles as a search box) lets you type a string to filter what scripts should appear in the Script Chooser.
- **Expand Panes** - Expands or contracts the window to show or hide the sidebar panels.
- **Debugger Options** - Pops-up a menu to configure the debugger.
  - **Auto Prettify Minified Sources** – If enabled, the debugger will automatically detect minified JS files and pretty-print them.
  - **Pause on Exceptions** - If enabled, execution of script will automatically pause whenever a JavaScript exception is thrown.
  - **Ignore Caught Exceptions** - If enabled, the debugger will automatically pause the execution of the script whenever a JavaScript exception is thrown.
  - **Show Panes on Startup** - If enabled, the debugger's two sidebar panes are visible when you first start the debugger; by default, they are not.
  - **Show Only Enumerable Properties** - If enabled, allows you to filter the displayed list of variables after the "Filter variables" search box to will be added the variables panel.
  - **Show Variables Filter Box** - If enabled, do not display non-enumerable JavaScript properties
  - **Show Original Sources** - If enabled, allows you to use source maps to see the original source for code.
  - **Automatically Back Box Minified Sources** - If enabled, URLs with 'min.js' at the end will automatically be black boxed.

11.5. View and Run Style Sheets on a Web-page

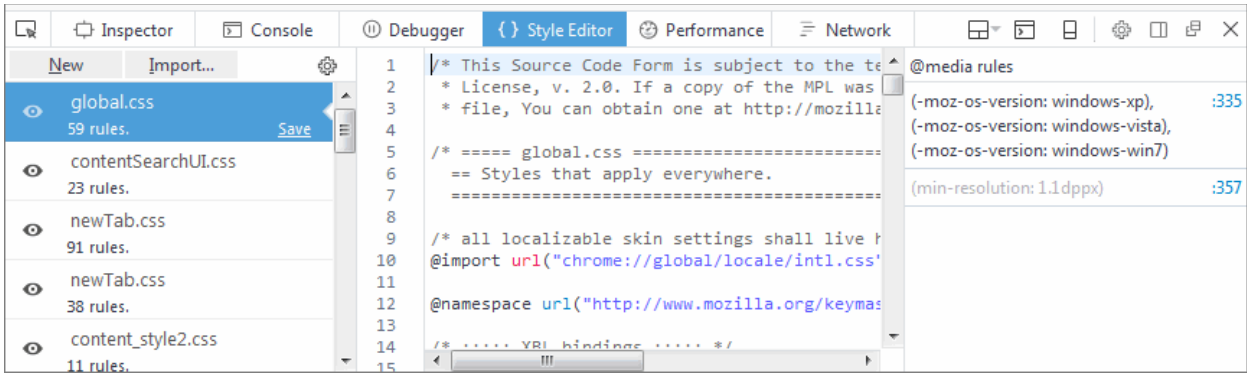
The 'Style editor' tool allows web-developers to experiment with different style sheets and preview page design 'in-browser' before final deployment. The editor allows web-developers to view a list of cascading style sheets (css) used in the current web-page. You can also save style sheets and import CSS to a page.

Click the links below for more help:

- **View and edit style sheets in a webpage**
- **Apply your style sheet to a webpage**

To view style sheets used in the currently web-page

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Style Editor'



The list of external and inline style sheets used for the webpage will be displayed in the left hand side pane and the rules defined in the style sheet selected from the LHS pane will be displayed on the right.

- To view the elements and styles defined for the elements in a style sheet, click on the style sheet listed in the left hand side navigation pane.
- To switch and preview the page with and without the application of a selected style sheet, click on the 'eye' icon beside the style sheet name in the LHS pane.
- To edit and experiment with styles, find the style rule applied to the desired element from the right hand side pane and change the parameters as you wish. The changes will be immediately reflected in the webpage viewed. But these changes are temporary and will be lost when the page is reloaded.

Tip: To identify the rule applied to a desired element, right-click on the element and select 'Inspect element' from the context sensitive menu. The lower pane in the window will display the 'div id' of the element. Search for the 'div id' in the style editor window by pressing Ctrl+F from the keyboard and entering the div id in the 'Find...' dialog

To save a style sheet

- Select the style sheet from the LHS pane and click 'Save' link beside it
- Navigate to the location in your computer and enter a file name with .css extension in the 'Save as' dialog.

Apply a style sheet to a web-page

You can create your own style sheet for element(s) in a page and apply to them and have a preview. This is useful for web-developers to experiment of different style sheets for different elements before deciding the final style.

To apply an external style sheet

- Click 'Import', navigate to the location in your system where you have saved the .css file and click 'Open'

The style sheet will be imported and the style rules will be applied to the elements defined in the sheet immediately for a preview.

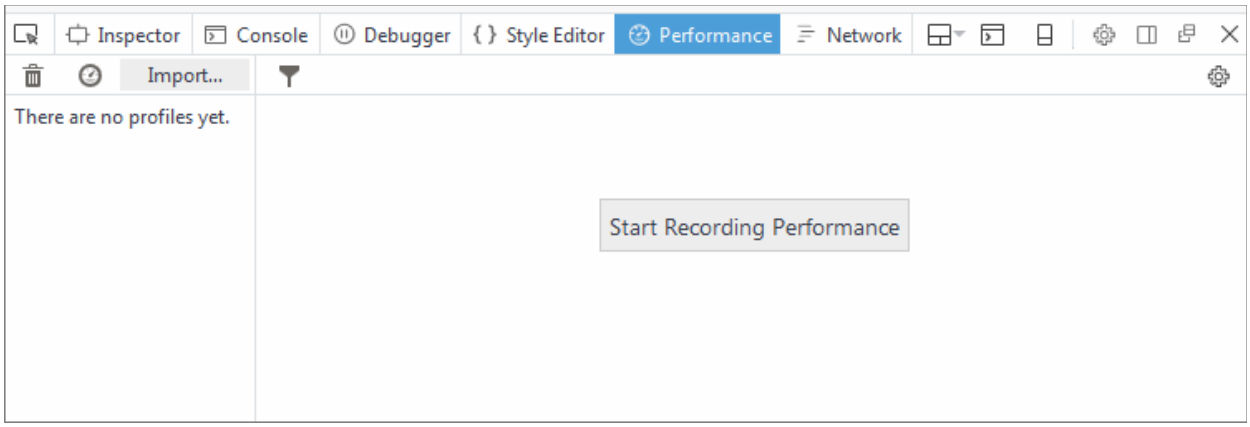
11.6. Improve Web Page/Web Application Performance

The performance tool lets developers optimize their code by testing the performance of a page within a set timeline.

On executing the code, the performance samples the state of the JS engine and records the code stacks at various time points. The performance then calculates the time spent by the browser to execute each stack and displays a statistical report. The report enables the web developer to analyze and identify the bottlenecks in the code.

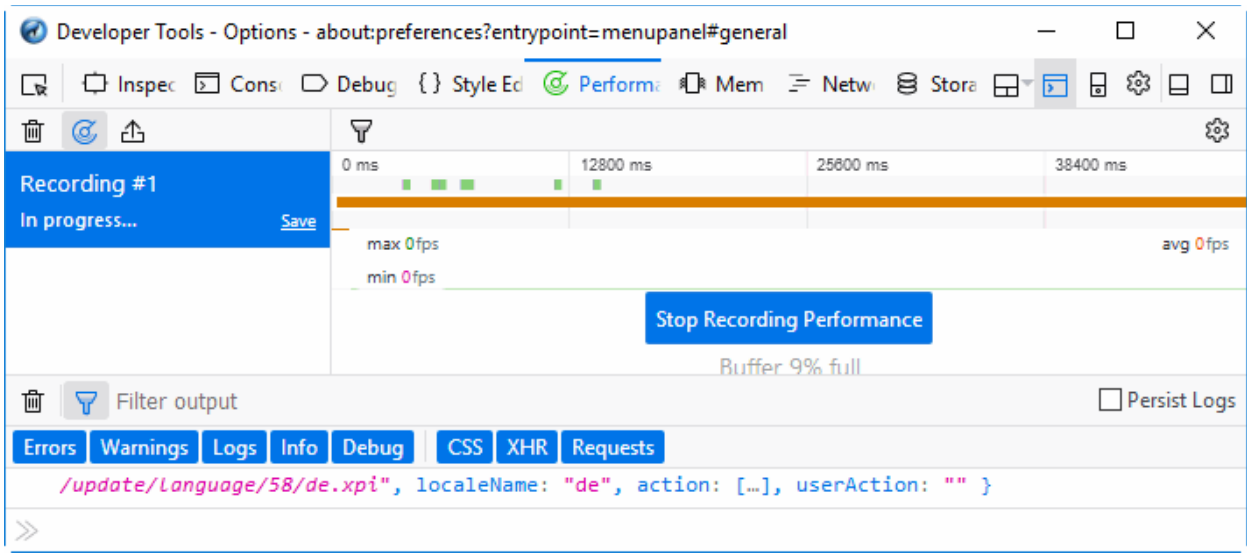
To run the Performance

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Performance'



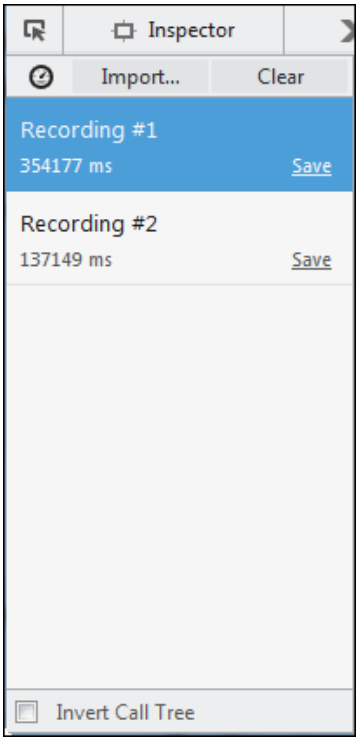
- Execute your code in IceDragon and click 'Start Recording Performance' to commence the sample.
- Leave the profiler to record the samples for required time period and click the 'Stop' button to stop the recording.

The 'Performance' will compile the results and display the report.



Understand the Report

The recording left hand pane of the report displays a list of captured profiles which can be loaded at any time. The right hand pane displays the currently loaded profile.



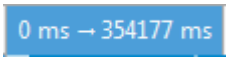
- Click the 'clock' icon at the top-left of interface and repeat recording the samples and generate several profile reports.
- Click the 'Import' and navigate the folder to upload the profiles
- Click 'Clear' to remove all profiles.
- 'Invert Call Tree' checkbox - If checkboxed, the profiler report will,
  - make a list of all stack frames with a Self Cost greater than zero: that is, stack frames which were actually execute when the sample was taken
  - order the list by the number of samples taken while in that stack frame
  - for each entry in the list, show the call stack backwards to the top-level function.

The profile contains four main sections provides:

- **breadcrumb trail**
- **frame rate timeline**
- **timeline for platform code execution**
- **detailed output of the JavaScript sampling profiler**

Breadcrumb trail

The upper half of the loaded profile displays a time verses call stack size bar-graph of the profile. The call stack represents the amount of active functions at the time when the sample was taken.



You can analyze the response for the stacks for a specific time range too. Selecting a portion of the graph, by dragging the mouse cursor displays a new tab above the graph indicating the selected portion. Clicking the new tab opens the enlarged view of the selected portion.

To click and drag in the frame rate timeline or the sampling profiler timeline, will

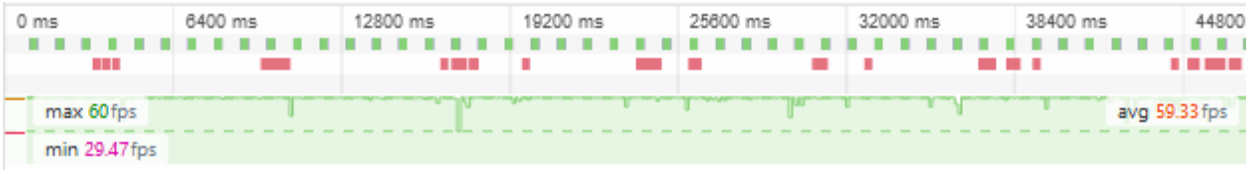
- highlight the section of the timeline

- show samples that were recorded in that section
- appear "+" in the toolbar at the top. Click the '+' to view the highlighted expanded section. You will see a separate breadcrumb nail the toolbar at the top.

You can switch between the complete profile and the section using the breadcrumbs, zoom in on a subsection within the section.

Frame rate timeline

This item allows you to view the browser's responsiveness within the period covered by the profile. The x-axis is time over the profile period and contains three annotations: the target frame rate (always 60 frames per second), the average frame rate, and the lowest frame rate.



Timeline for platform code execution

Category	Description
Network	Sending and processing network requests and responses.
JIT	JavaScript code compilation.
GC	Garbage collection.
Inputs & events	Events such as mouse or DOM events.
Styles	Parsing CSS.
Graphics	Includes handling reflows and repaints as well as WebGL.
Storage	Most often this is IndexedDB.
Gecko	Indicates items that doesn't fit into any of the other categories.

Hover over the color key for a current category will fade all other categories.

Detailed output of the JavaScript sampling profiler

The lower half display the details of the profile.

Total Time (ms)	Total Cost	Self Time (ms)	Self Cost	Samples	Function
352972	100%	0	0%	1313	(root)
352972	100%	0	0,22%	1313	Startup::XRE... :4172 Gecko
352957	97,86%	0	0%	1285	Timer::Fire:563 Gecko
352926	95,96%	0	0%	1260	js::RunScript
31	1,67%	0	0%	22	nsR... :1113 Graphics
0	0,22%	0	0,22%	3	nsCycleC... :4174 GC
15	1,90%	0	0,07%	25	ns...:726 Input & Events
15	1,29%	0	0%	17	Pres...:4220 Graphics
0	0,53%	0	0,15%	7	:403 Input & Events

The **'Total Time (ms)'** display the break down view of the stacks that contained specific active functions and their share in total number of stacks in percentage in the first column, the number of stacks called by the functions in the second column and a tree structure view of the functions in the third column.

The 'Total Cost' indicates the number of samples to be taken in which the corresponding "Function" appeared in the call stack.

The **'Running Time'** indicates the total number of samples executed within the recording time followed by the percentage of stacks that executed the active functions.

The **'Self Cost'** indicates the number of stacks that were called while executing the active functions, and not the stacks that called the function.

The **'Self Time (ms)'** indicates the amount of time spent executing the function, exclusive of any functions called by this function in the percentage of stacks that executed the active functions.

The '**Samples**' indicates the number of samples to be taken in which the corresponding "Function" appeared in the call stack.

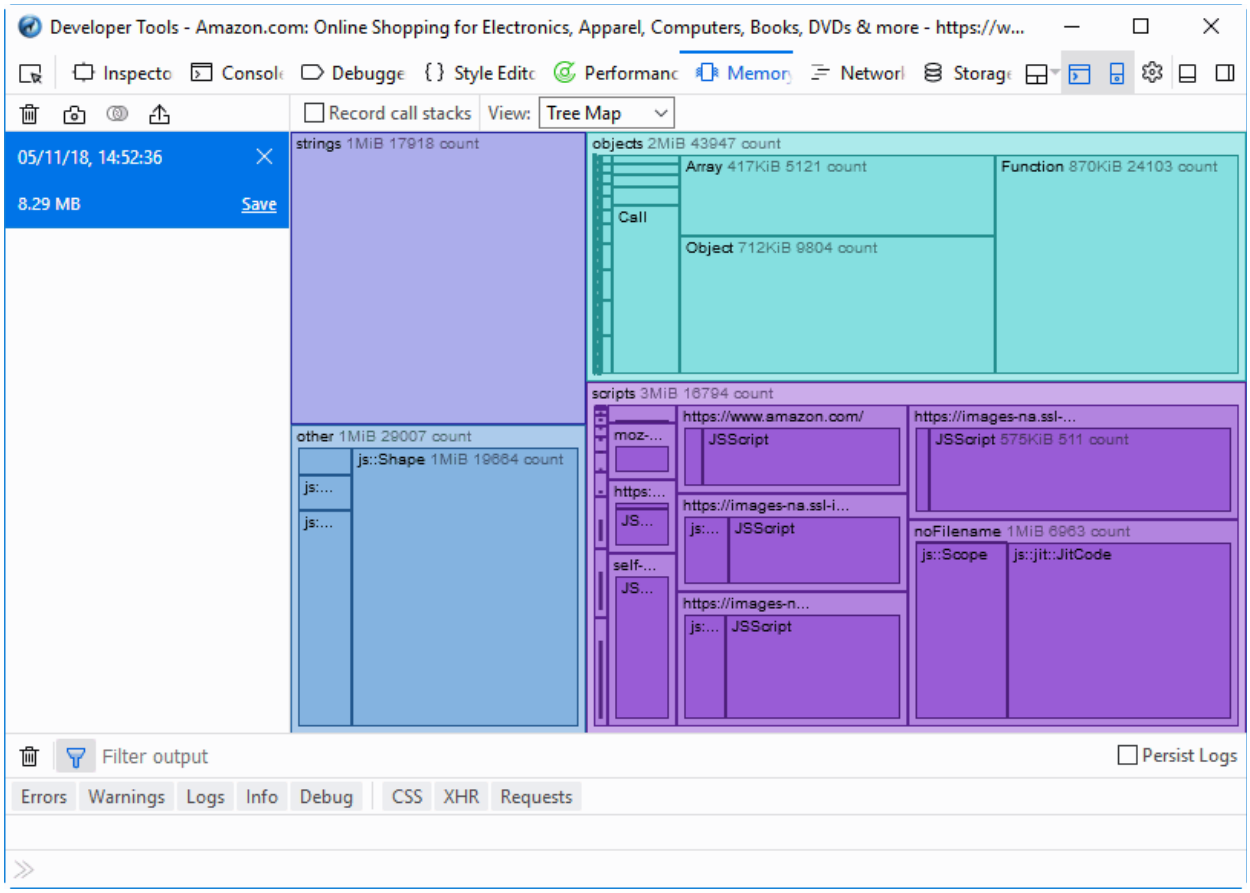
The '**Function**' displays the function name, source file, line number and domain that served the file. To debug a specific function, hover the mouse cursor over the function and click on the right arrow that appears at the end of the line.

11.7. Memory Tool

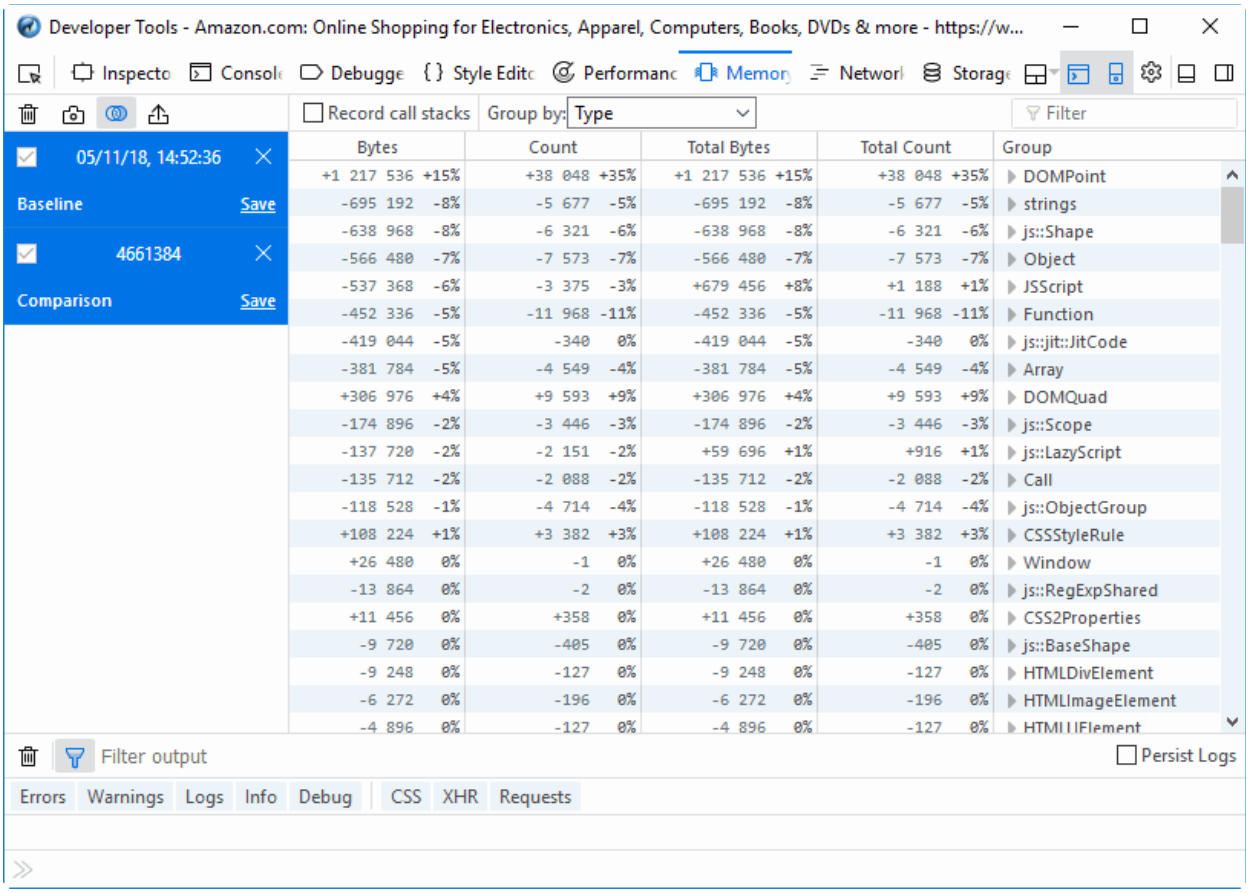
The 'Memory' tool lets you visualize how web-page elements use memory. Memory allocation is represented as a tree of nested rectangles.

To access the memory interface

- Click the hamburger/ 'Open Menu' at top-right
- Select 'Web Developer' > 'Memory'
- Click the 'Take snapshot' button or click the camera icon at top-right

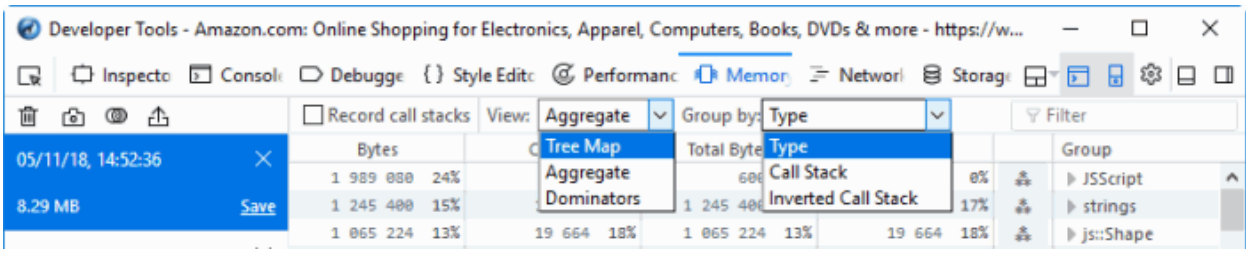


- Click 'Save' link to save the snapshot. Navigate to the locate to save the entry with the extension .fxsnapshot.
- Click 'X' next to entry to delete a snapshot.
- Click 'Import' to load the snapshot from the extension .fxsnapshot file.
- Click the 'Compare snapshot'.
- Select the snapshot to use as basis then the snapshot to compare.



You also can store information about the subroutines of a computer program and allows you to view results in different ways along as group your data

- Record call stacks
- View: Tree Map, Dominators, or Aggregate
- Group by: Type, Call Stack or Inverted Call Stack



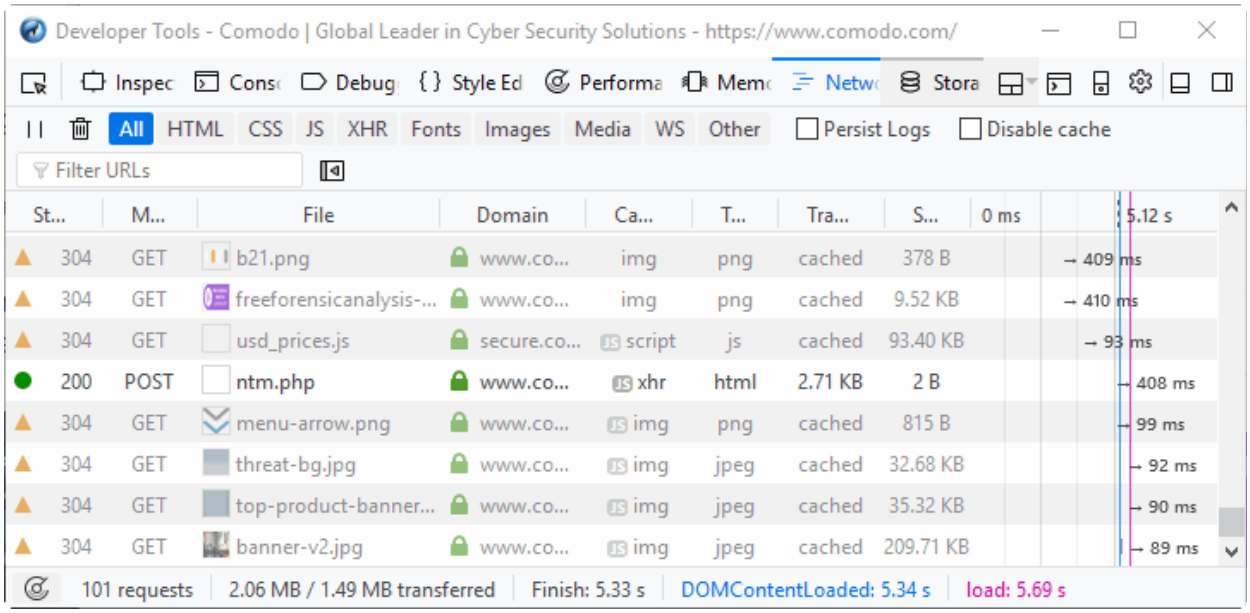
11.8. Network Monitoring

The 'Network Monitoring' tool allows developers to view network activity on a site.

To view the page source

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Network'
- Click the stopwatch icon to run the performance analysis tool.

The 'Network' tab loads the site twice. First with an empty browser cache, then again with a primed cache. This simulates the initial visit and a subsequent visit to the site.



The results will be summarized in the table and as a pie chart.

- To return to the list of the Network monitoring, click 'Back' request on the left.
- To open the current network run with a filter automatically applied, click the slice pie.

The Network table displays,

- **Status -** The HTTP status code returned. Hover over the icon to see the exact code. Green color-coded icon - success (2XX codes), orange - redirection (3XX), or red - errors (4XX and 5XX).
- **Method**: Shows the HTTP request method.
- **File**: Shows the basename of the file requested.
- **Domain** - Shows the domain of the path requested.
- **Cause** – Reason the network request appeared. (XHR request, <img>, script, script requesting an image, etc.)
- **Type** - Shows Content-type of the response.
- **Transferred** – Displays the number of bytes transferred to load the resource.
- **Size** - Shows the size of the response.
- **Timeline** - Displays a timeline for the different parts of each request.

Each column can be sorted by ascending or descending.

The toolbar will be displayed at the top of the pane and allows you to switch between different pages:

- **Headers -** Provides information about the request: URL, status code, the HTTP request and sent response headers.

The filter header field allows you to filter the headers.

- **Cookies -** Provides full details of any cookies sent with the request or response.
- **Params -** Displays the GET parameters and POST data of a request.
- **Response -** Displays the complete content of the response. Depending of the type of response, it will be displayed in HTML, JS, or CSS as text, JSON as an object, an image will be shown as a preview.
- **Timings -** Provides detailed timeline bar for the request showing how the total wait time is split into the

various stages.

The developers can also sort their certain type of files by HTML, by JS, by XHR, by Fonts, by Images, by Media or by Flash type.

- Click the buttons in the network toolbar to filter the list by type. This is also allows you to find out the total size and download time for a particular type of file.

11.9. Use the Developer Toolbar

The developer toolbar is a command-line interface which lets web-devs issue commands to pages and IceDragon itself.

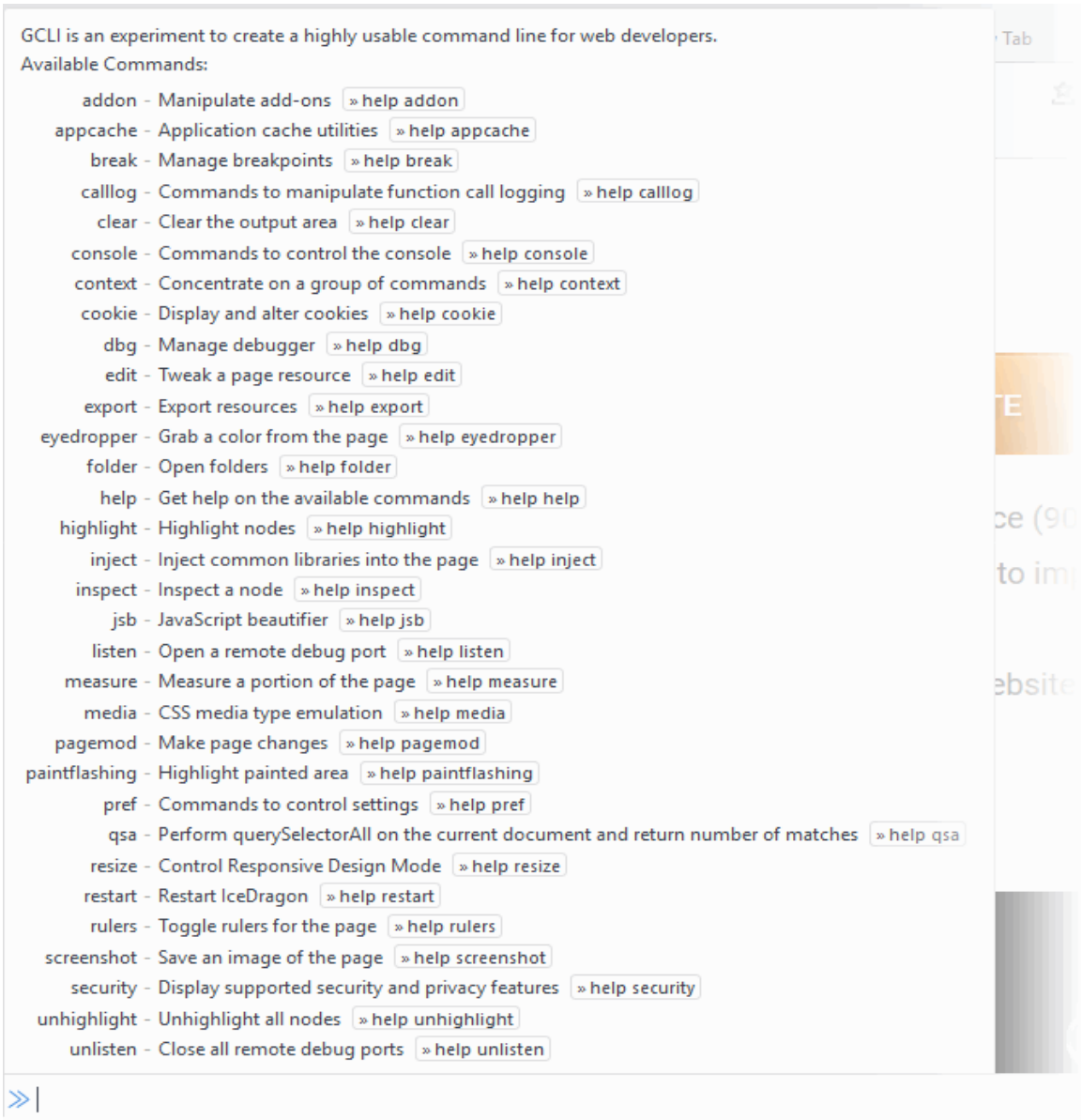
To open the developer toolbar

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Developer Toolbar'.

- Press F1 to open the pop-up help.

  OR

- To view a list of supported commands, type 'help'.



11.10. Use the WebIDE

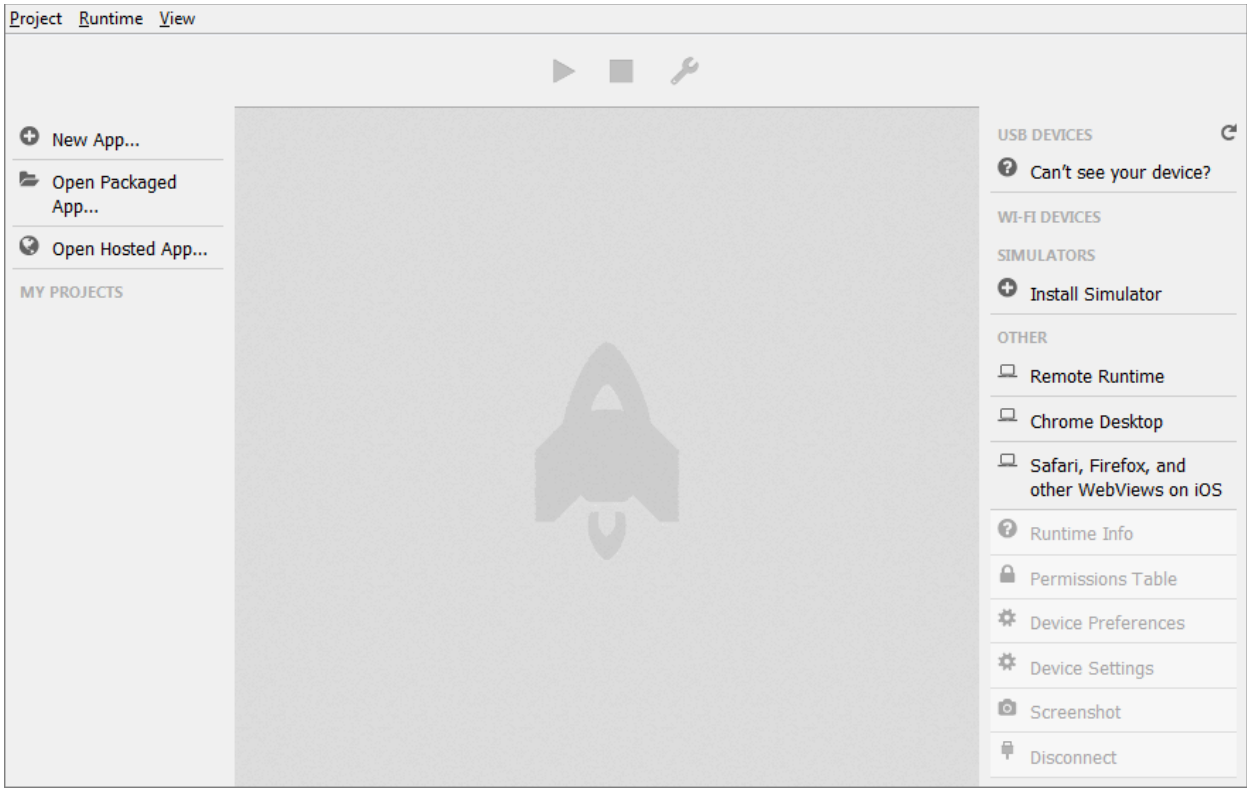
The WebIDE allows developers to manage runtimes and develop through the Firefox simulator or a real Firefox OS device.

The WebIDE provides three steps to run and debug the application:

- setting up a runtime
- creating an app or open an existing app
- installing the app on runtime

To open WebIDE

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > ' WebIDE'
- Alternatively, click the 'Customize' button from the menu on the bottom-right
- Select the WebIDE icon from the 'Additional Tools and Features' and dock it at the navigation bar
- Click 'Exit Customize' to save the changes.

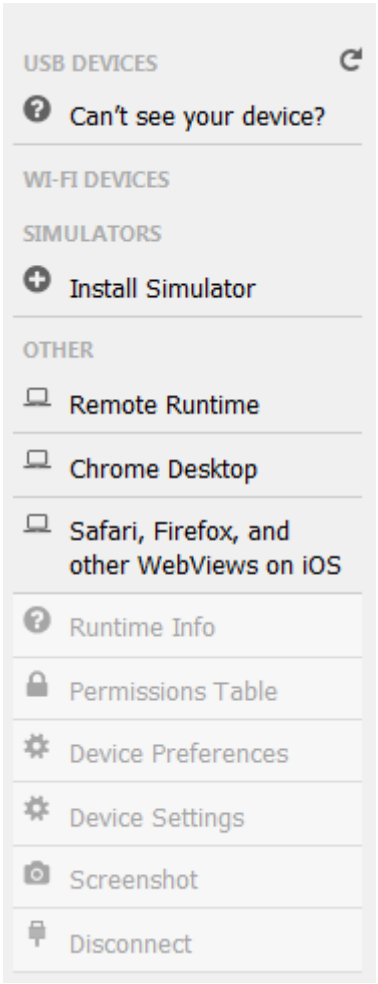


- The sidebar on the left displays existing apps or lets you to create an app
- The sidebar on the right allows you to select a runtime or set a new runtime.

To set up a runtime

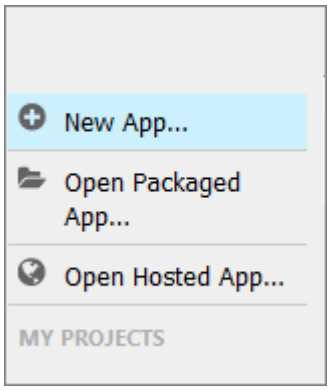
You can manage the runtime on the right of the sidebar. Runtimes are grouped into four types:

- USB devices – Displays OS devices connected over USB.
- WI-FI DEVICES – Displays OS devices connected over Wi-Fi
- SIMULATORS – Displays instances that you've installed
- OTHER – Allows WebIDE to connect to host and port to runtime remotely.



To add a new application

- Click the of the three options:
  - Create a new app



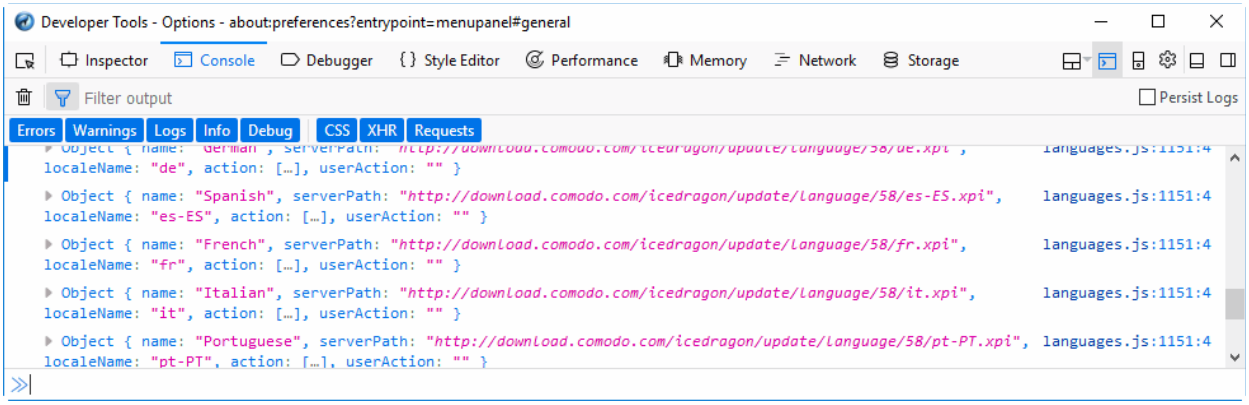
  - Open a packaged app
  - Open a hosted app
- To remove a project, click the 'Project' menu > 'Remove Project'.

11.11. Browser Console

The 'Browser Console' tool is advanced logging & debugging features that is executed in the context of IceDragon itself.

- Click the hamburger/ 'Open Menu' at the top-right

- Select 'Web Developer' > 'Browser Console'.



From here you can:

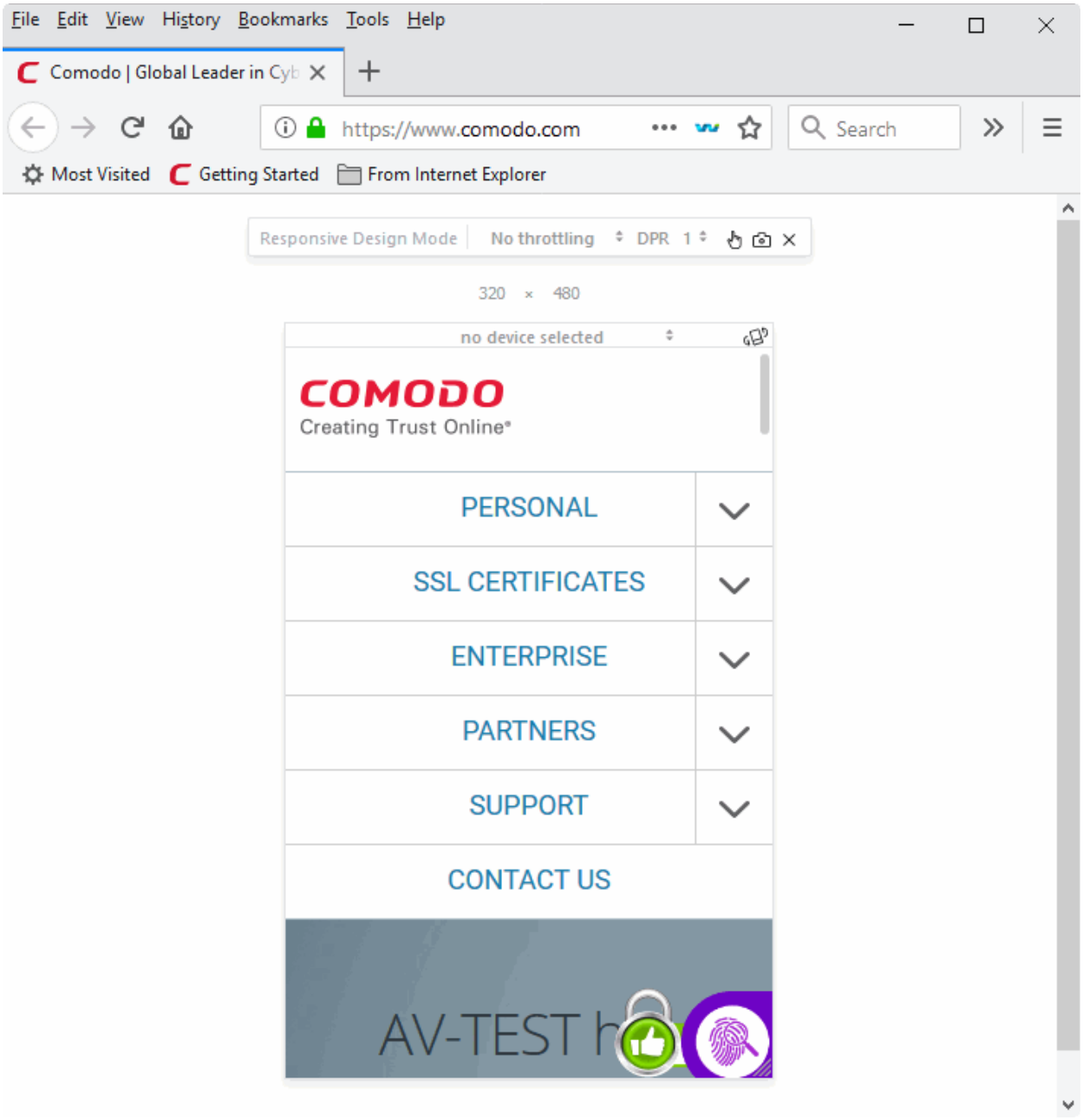
- View all JavaScript errors
- View logs in the browser
- Log any object directly to the console
- Provides helper console

11.12. Responsive Design View

'Responsive Design View' tool helps web developers to view, read and navigate designs on different screen sizes without changing the overall size of his browser window.

To open responsive design view

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer' > 'Responsive Design View'.



11.13. Eyedropper

The 'Eyedropper' tool helps web developers to select colors in the current page. Hover the magnifying glass over the page and you will see the color value for the current pixel you have selected in the Inspector web tools.

To open Eyedropper tool

- Click the hamburger/ 'Open Menu' at the top-right

- Select 'Web Developer' > 'Eyedropper'

To use the eyedropper

- Select a color from the page and copy it to the clipboard

  OR

- Change a color value in the **Inspector's Rules view**

11.14. Run Experimental Java Scripts on Page

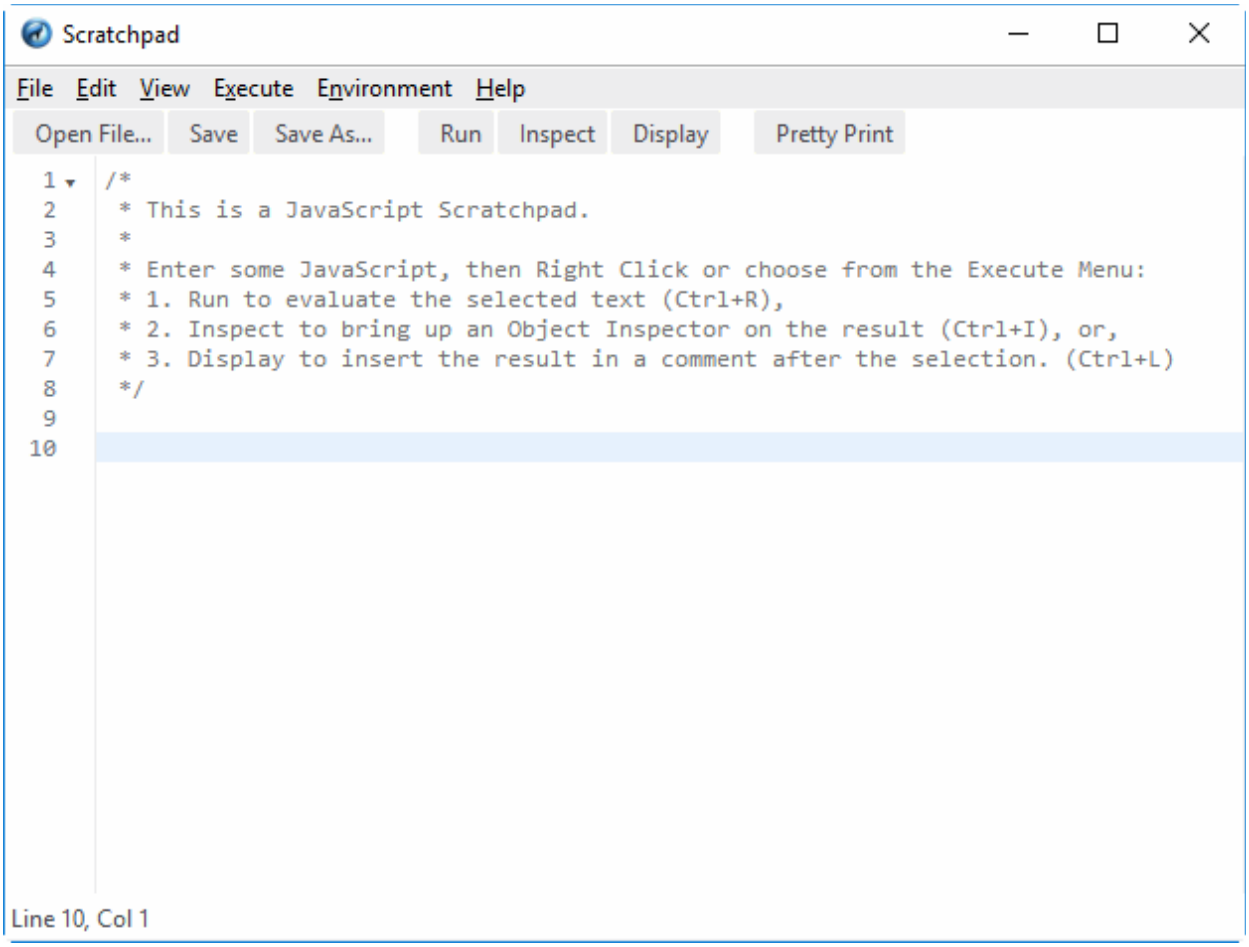
The 'Scratchpad' tool allows you to run experimental Java Script code for that page.

- You can use to try out various ideas and execute them on the web page before final implementation.
- You can use to edit and run Java Script codes but is limited to executing a single line of code at a time.
- You can use to execute many lines of code at a time. Some of the uses of 'Scratchpad' include testing new code, debugging and to run saved reusable java script codes.

To open 'Scratchpad' tool

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer'> 'Scratchpad'.

The 'Scratchpad' editor will open. This contains some brief information about how to use it.



After you have written the code in the Scratchpad, select it and right-click to execute or from the menu bar select 'Execute'. You have three choices to output the code:

- **Open File –** Opens JavaScript files.
- **Save / Save As** - Saves JavaScript code snippets.
- **Run** - Executes the code in the page.
- **Inspect** - In addition to executing the code in the page, an object inspector will be displayed that will help you to analyze the returned value.
- **Display** - After executing the code in the page, the results are inserted in the Scratchpad window as a comment. This will help you to keep track of the changes made in the page.
- **Pretty Print** – Allows you to print a code.

11.15. View Page Source

Comodo IceDragon enables you to view the source code of the wepage you are viewing.

- This is useful for web developer to analyze the codes and style rules while they are developing their own web pages.

To view the page source

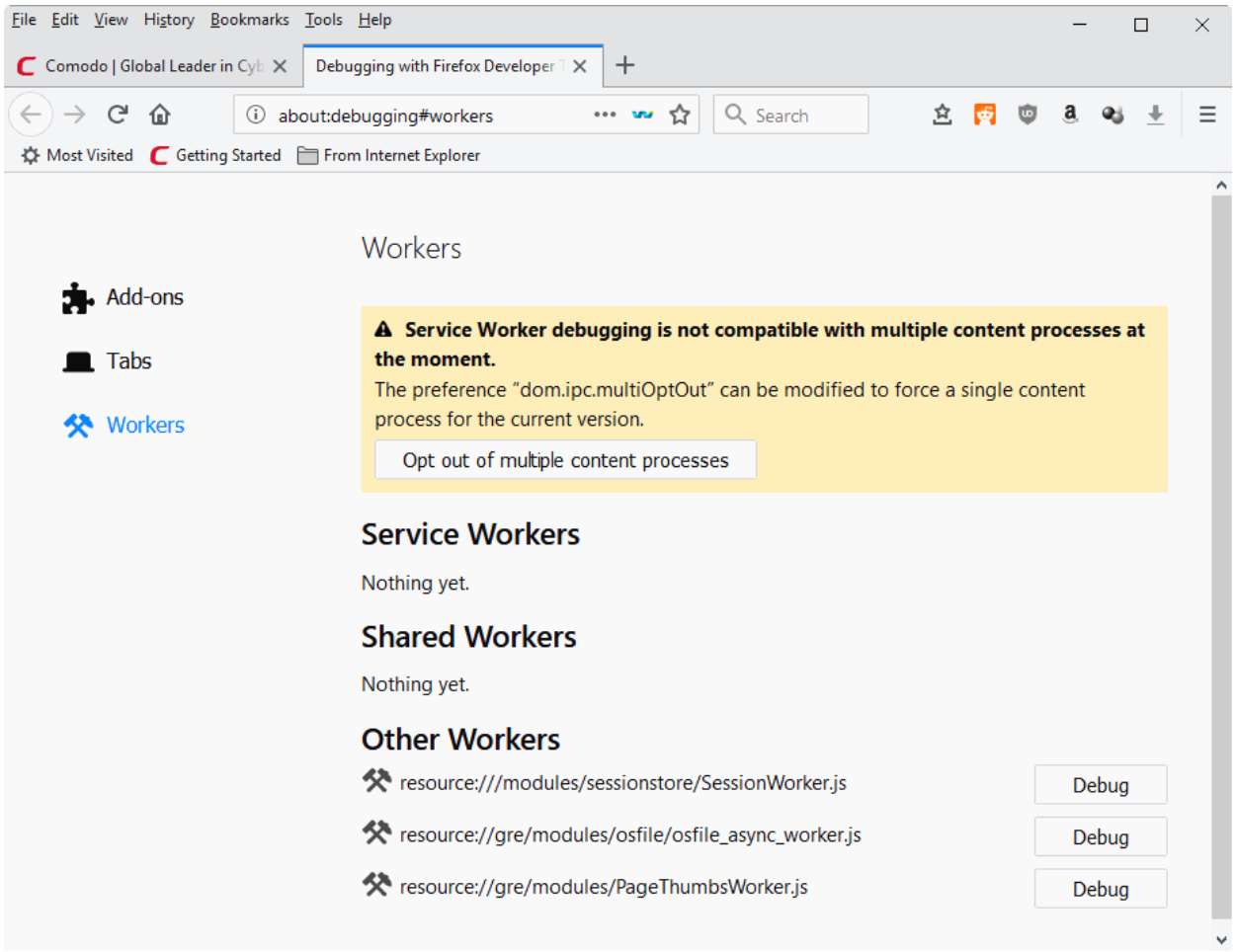
- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer'> 'Page Source'

```
<!doctype html>
    <html class="no-js" lang="en">
    <head>
        <script src="https://cdn.optimizely.com/js/7343700018.js"></script>
        <meta charset="utf-8" />
        <meta http-equiv="content-language" content="en-us">
        <meta http-equiv="X-UA-Compatible" content="IE=edge" />
        <link rel="canonical" href="https://www.comodo.com/" />
        <title>Comodo | Global Leader in Cyber Security Solutions</title>
        <meta name="description" content="Comodo, the leading SSL Provider offers
        <meta name="keywords" content="Comodo, Internet Security, SSL Certificate'
        <meta name="robots" content="index, follow, noydir, noodp"/>
        <meta name="viewport" content="width=device-width, initial-scale=1.0, maxi
        <meta property="og:type" content="website" />
        <meta property="og:url" content="comodo.com" />
        <meta property="og:site_name" content="comodo.com" />
        <meta property="og:image" content="/comodo-icon.jpg" />
        <meta property="og:title" content="Free Internet Security and Antivirus |
        <meta property="og:description" content="Comodo, the leading Internet Secu
        <meta name="p:domain_verify" content="ea9d1c4aa626d278abe288647ab87a38" />
        <link rel="image_src" href="/default-image.jpg" />
        <link rel="apple-touch-icon" href="/apple-touch-icon.png" />
        <link rel="stylesheet" href="/css/normalize.css" />
        <link rel="stylesheet" href="/css/owl.carousel.min.css" />
        <link rel="stylesheet" href="/css/owl.theme.default.min.css" />
        <link rel="stylesheet" href="/css/main-v2.css" />
        <link rel="stylesheet" href="/includes/slider/style.css" />
        <link rel="stylesheet" href="/css/hero-slider.css" />
        <script src="/js/vendor/modernizr-2.8.3.min.js"></script>
        <!--Start Google Analytics Tracking-->
<script>
```

11.16. Service Workers

Through the IceDragon you can develop and debug extensions (e.g, scripts, popups, content scripts, sidebars and push notifications code). You can debug: 'Add-ons', 'Tabs' and 'Workers'.

- The sections will be updated automatically as workers get registered.



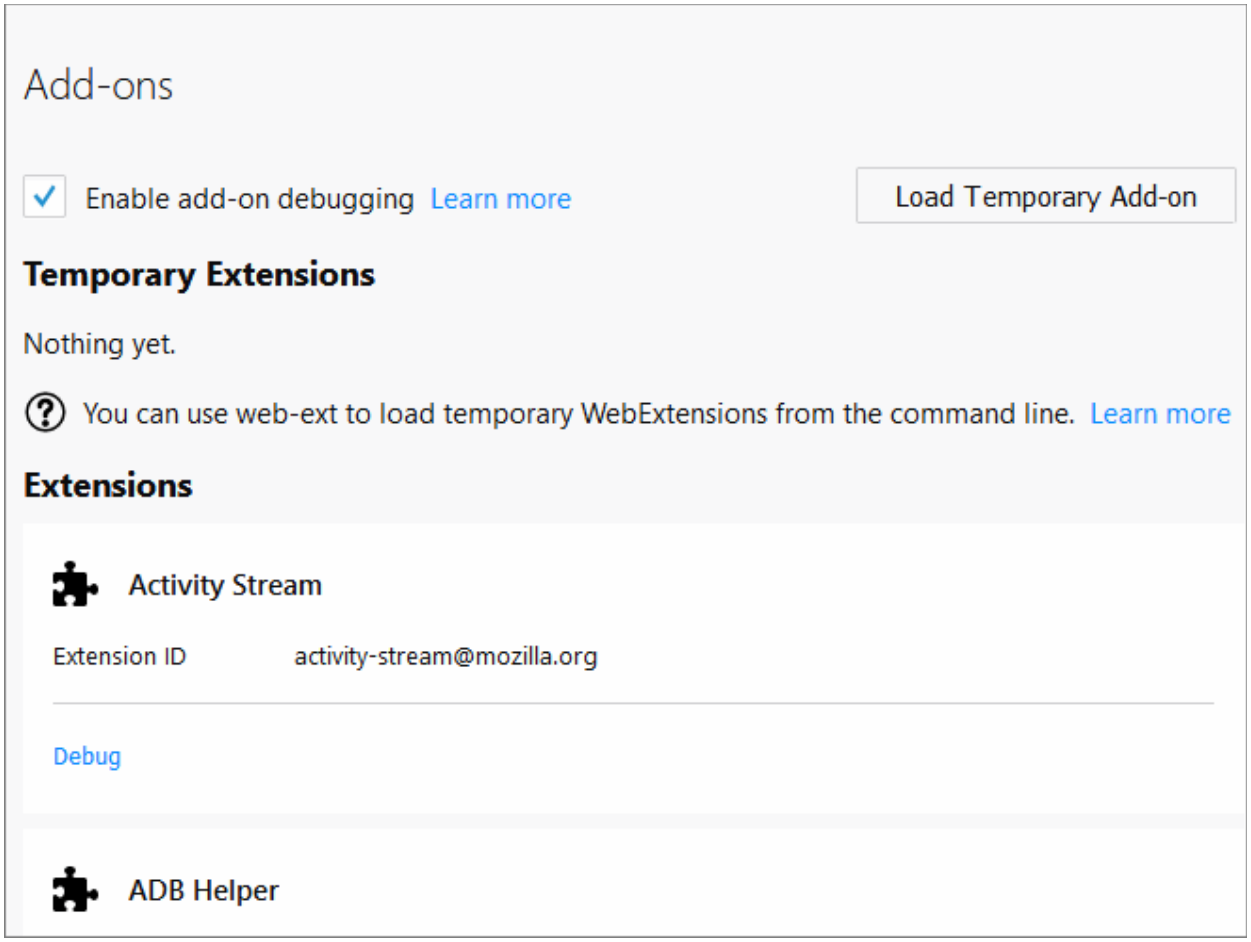
To view the service worker

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer'> 'Service Worker'

Open Addons to start debugging addons

The 'Add-ons' page lists all bootstrapped add-ons that are currently installed.

- Click the 'Add-ons' tab
- Checkbox 'Enable add-on debugging to load an add-on temporarily from disk



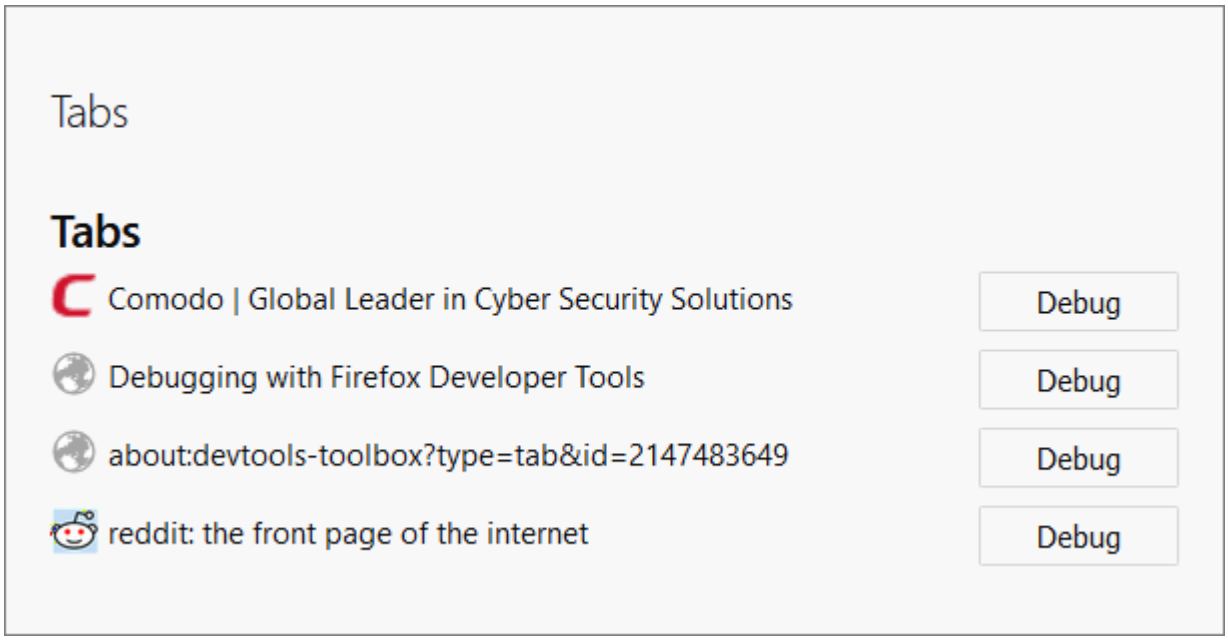
- Navigate to the directory to upload the add-on file
- Select it in directory and click 'Open'.

Note: Addon will be available until you restart your browser.

- Click 'Debug' link to accept an incoming connection.
- Click 'OK' to start the debugger in a separate window.

Open Tabs to start debugging currently opened pages

- Click the 'Add-ons' tab > 'Tabs'
- Select the page you want to debug and click 'Debug' button next to it.



Open Workers to start debugging workers

- Click the 'Add-ons' tab > 'Workers'
- The 'Workers' tab allows you to debug 'Service workers', Shared Workers and Other Workers.

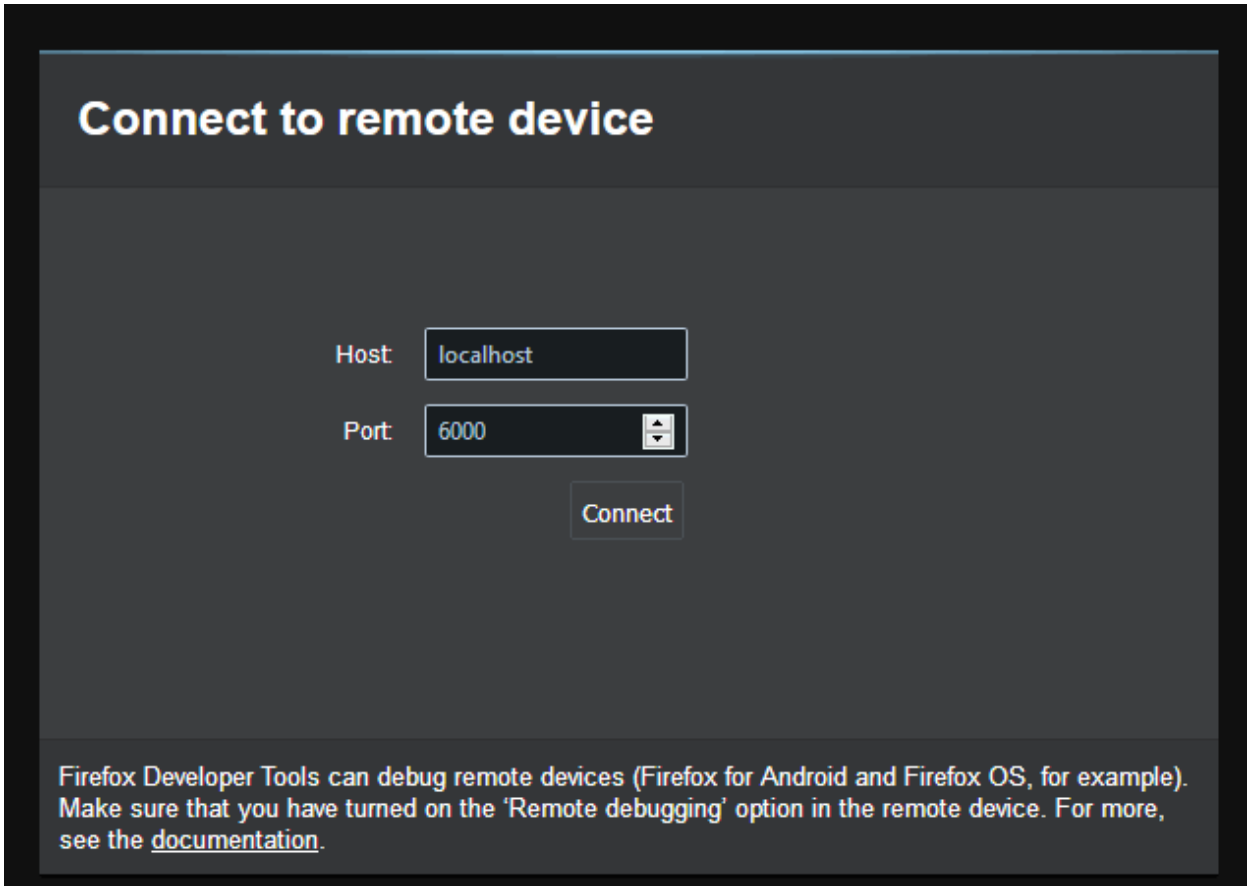
- Select the page you want to debug and click 'Debug' button next to it.
- To send a push notification, run a service worker. You will see two buttons next to it: 'Debug' and 'Push'.

Tip:The 'Service worker' are not available as follows:

- If service set to false in **about:config**
- If private browsing mode is run
- If you set 'Never Remember History or Always use private browsing mode in the the 'History' section.

11.17. Connect Remote Device

IceDragon lets you debug code remotely that is run in other browser.

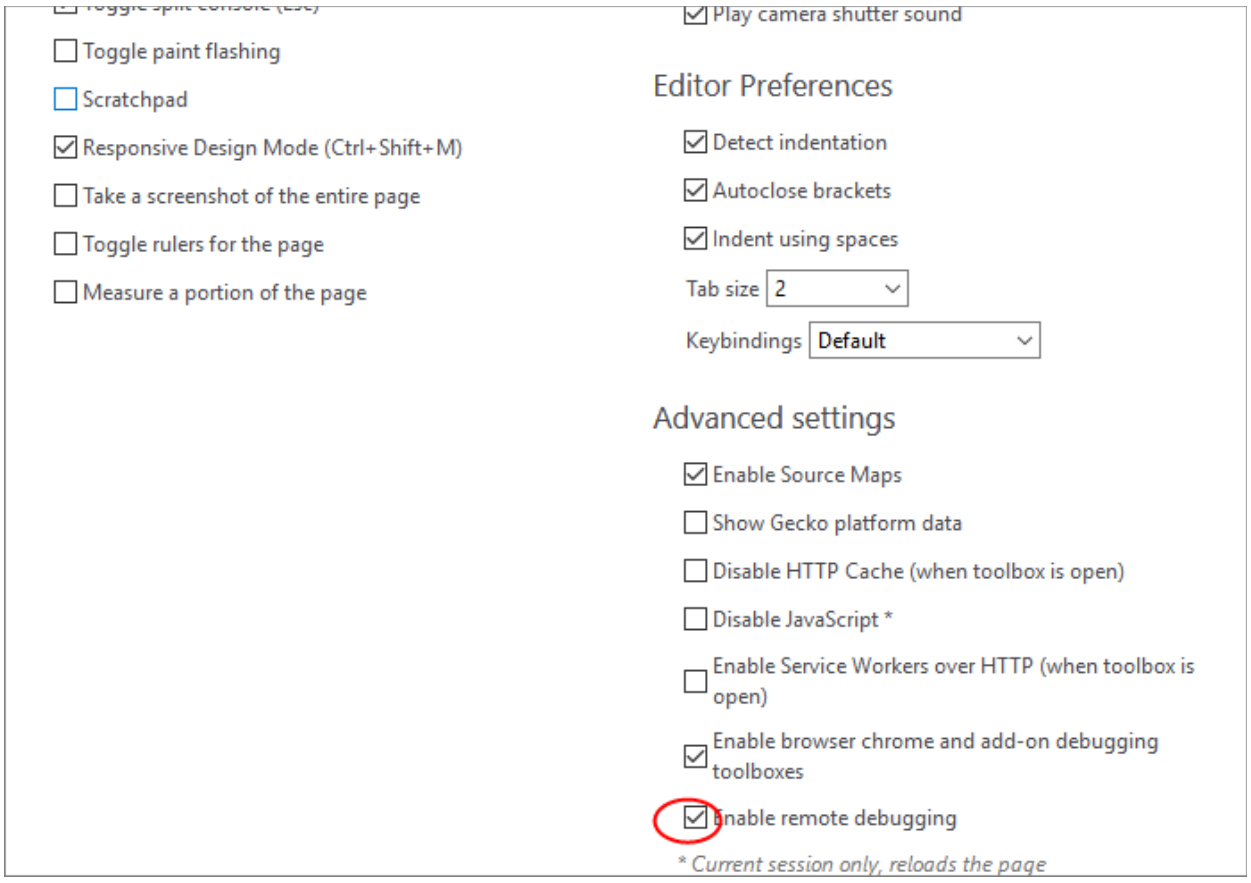


- In the opened interface, enter the host name and port though the which IceDragon console can be accessed.
- Click 'Connect' to confirm your choice.

This tool is available when 'Enable remote debugging' is selected.

To do this:

- Click the hamburger/ 'Open Menu' at the top-right
- Select 'Web Developer'> 'Web Console'
- Click the cog icon at the top-right of the console pane.
- Scroll to 'Advanced settings' then select 'Enable remote debugging'.



11.18. Add More Web Development Tools

To add more web development tools

- Click the hamburger button at the top-right corner
- Select 'Web Developer' > 'Get More Tools'
- You will be taken to a Mozilla page from which you can download web-dev add-ons
- See **Install Add-ons** if you need help to install add-ons.

11.19. Work Offline

In 'Offline Mode' you are not connected to the internet but are still able to view cached and saved web pages.

You can:

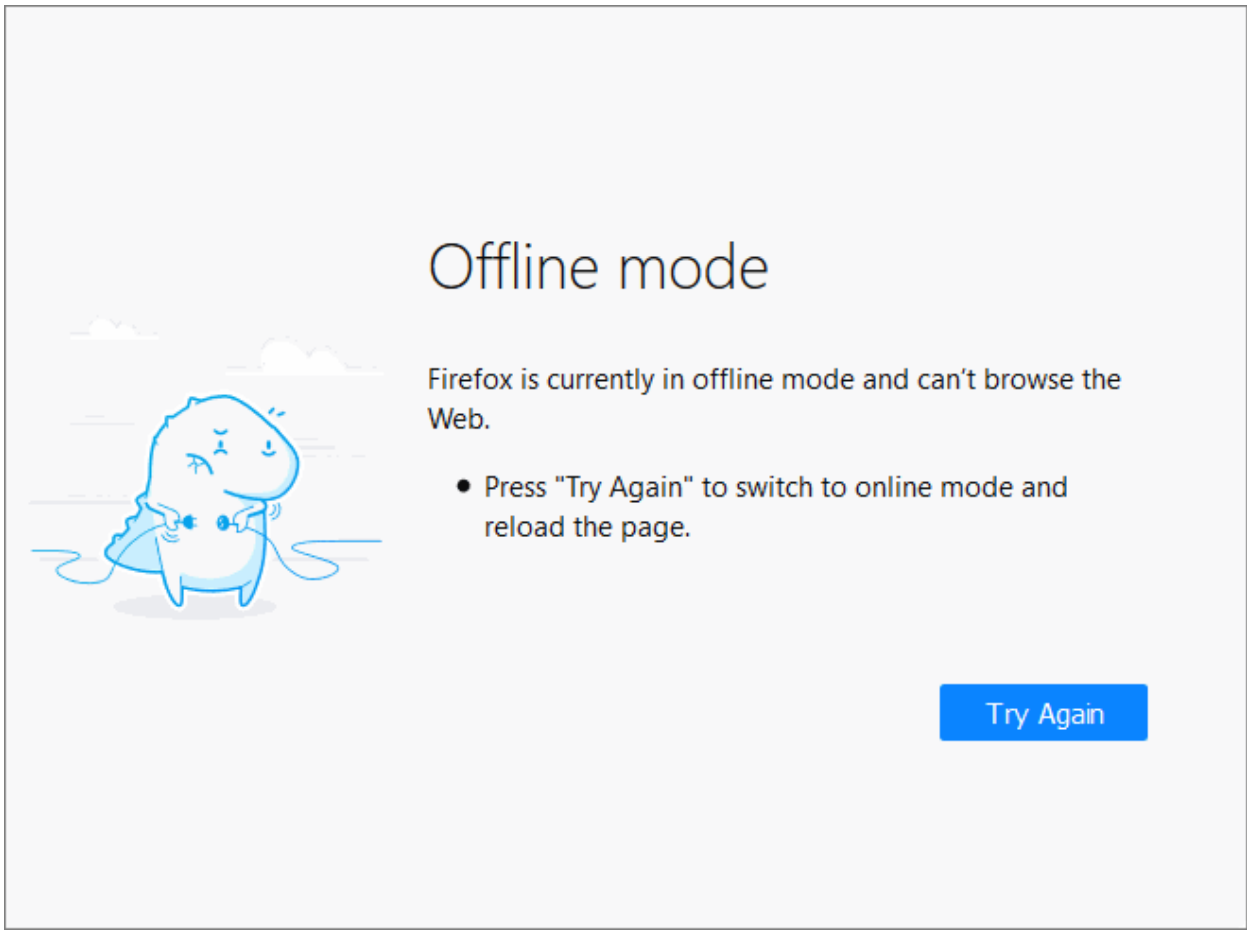
- View cached and saved web pages.
- Open locally saved files and images
- Configure Ice Dragon

You cannot:

- Access the internet
- Send/receive mail
- Download new files

To enable offline mode:

- Click the hamburger/ 'Open Menu' button at the top-right corner
- Select 'More' > 'Work Offline'



12. Troubleshooting

This section explains how to resolve problems that might arise when you are using Comodo IceDragon.

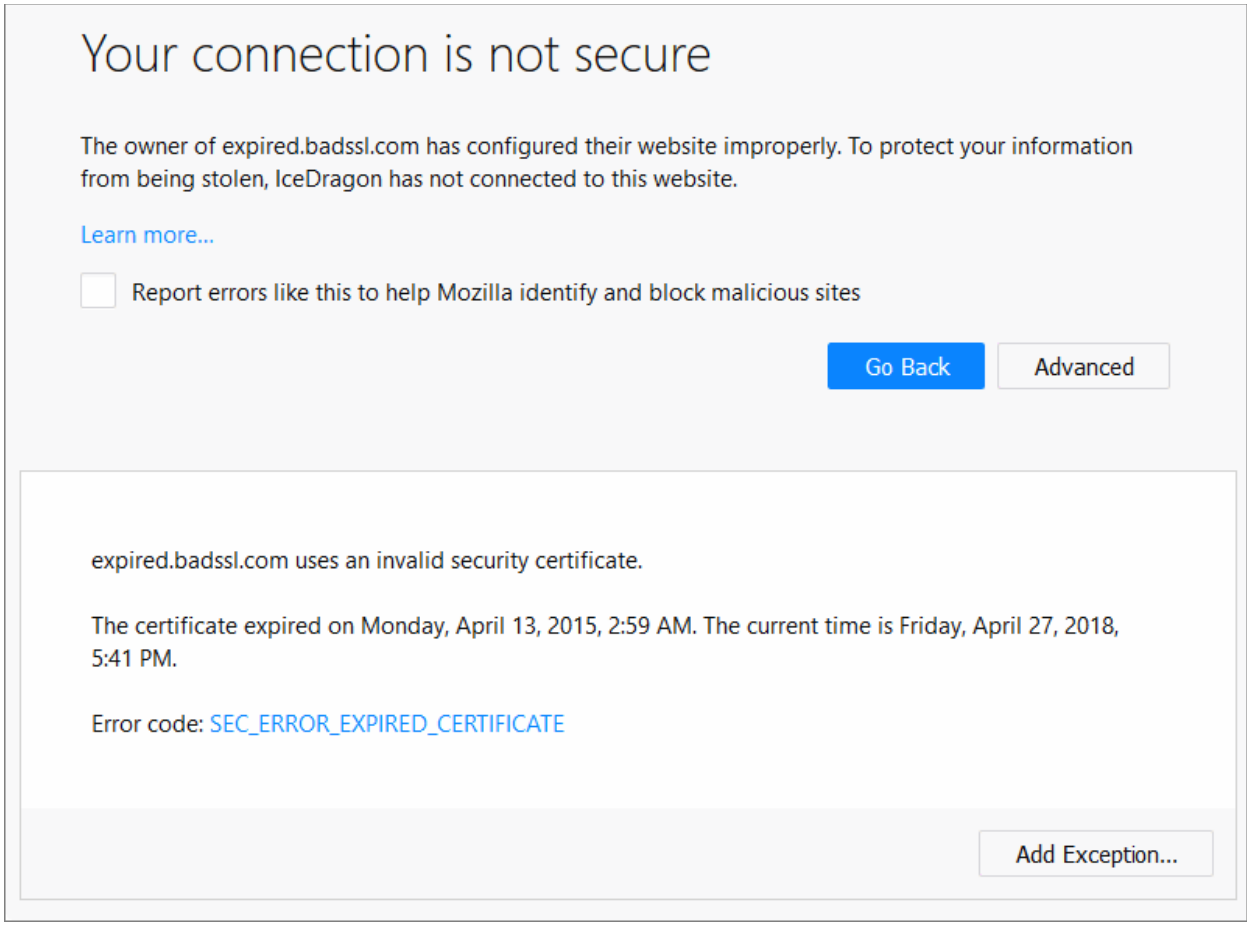
- **Error: "Your connection is not secure"**

12.1. Error: "Your connection is not secure"

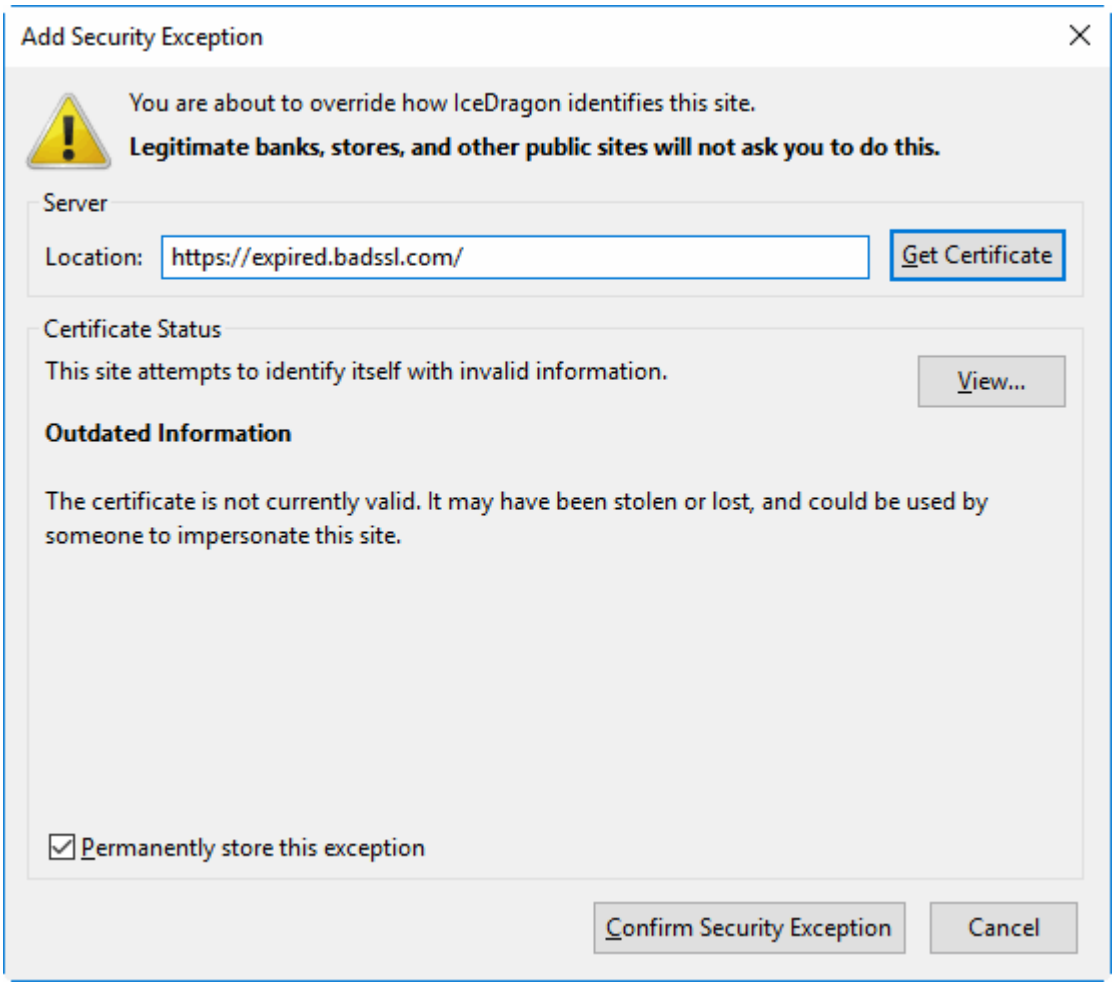
IceDragon may show this message when there are problems with a website's TLS/SSL certificate. You are advised not to visit the site in question, especially if you plan to submit confidential details such as login information or personal data.

To create an exception for the site

- When the error appears, click the 'Add Exception' button at the bottom of the warning:



The 'Add Exception' dialog will open.



- The 'Get Certificate' button allows you to inspect the certificate in detail
- Check the 'Permanently store this exception' box to trust the certificate on all future visits
- Click 'View' to open the certificate view
- Click 'Confirm Security Exception' to apply your choice.

13. Report a Bug

Comodo continually updates its products and intends to keep them bug-free. If you find any bug or have questions, please submit a bug report post them in the Feedback section of the Comodo IceDragon forum at:

http://forums.comodo.com/bug-reports-cid-b284.0/

If you haven't done so already, please create an account before posting.

Comodo Security Solutions

Comodo Security Solutions is a global innovator of cybersecurity solutions, protecting critical information across the digital landscape. Comodo provides complete, end-to-end security solutions across the boundary, internal network and endpoint with innovative technologies solving the most advanced malware threats. With over 80 million installations of its threat prevention products, Comodo provides an extensive suite of endpoint, website and network security products for MSPs, enterprises and consumers.

Continual innovation and a commitment to reversing the growth of zero-day malware, ransomware, data-breaches and internet-crime distinguish Comodo Security Solutions as a vital player in today's enterprise and home security markets.

About Comodo Cybersecurity

In a world where preventing all cyberattacks is impossible, Comodo Cybersecurity delivers an innovative cybersecurity platform that renders threats useless, across the LAN, web and cloud. The Comodo Cybersecurity platform enables customers to protect their systems and data against even military-grade threats, including zero-day attacks. Based in Clifton, New Jersey, Comodo Cybersecurity has a 20-year history of protecting the most sensitive data for both businesses and consumers globally. For more information, visit comodo.com or our **blog**. You can also follow us on **Twitter** (@ComodoDesktop) or **LinkedIn**.

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