

Description of Tracked User Behaviors in the NavTree Dataset

This table describes different behaviors or additional data that is added to the edge entity. **The importance of recording different behaviors** and attach them to the edge has two sides: **1) is the possibility of having soft and strong links between nodes** to visualize how the user focus flows between the many open tabs in a browser. Soft links are links between A and B, where B is a link inside A and has been opened in the background. Hard links between A and B are links where there was no new window or tab change while going from A to B. **2) is that it allows us to answer questions like these:**

- Does the surfer open one link per page constantly changing the active tab?
- or does he open several links in background tabs to browser more than one link per page? (**content consumption density**)
- Does the user got to the current url from a new tab or window (that means he typed the url himself) or did he execute some action in a the active tab with a previously loaded url?

Behavior Macro Group	details	User Actions	Characteristics	Prime Constant in Database
New window		Cmd + N	There was a new window event	2
New Tab	Blank		beforeNavigateEvent.target.url url == BLANK	3
	Pointed		beforeNavigateEvent.target.url url != BLANK	5
	Active	Cmd + T/N / File new tab/Window	NewTab == ActiveTab of its window	7
	In Background	Cmd + Click / Open in new tab/window	NewTab.window.activeTab != NewTab	11

It's important to note that some details cannot be mapped in the current Safari JavaScript scope. e.g.. the action producing a change in the browser cannot be distinguished (click, bookmark was clicked, user typed the url, JS or http redirected).