

Private Mode, Public Servers

What built-in AI changes about private browsing: which browsers let an assistant observe private sessions, where the data goes, what the vendor documents, and what we verified by running all seven.

CHROME

SAFARI

EDGE

FIREFOX

BRAVE

OPERA

COMET

Every Browser but Firefox Now Curbs AI in Private Windows. Almost None of Them Says So.

We ran current builds of all seven browsers, plus Opera’s agentic Neon, on 27, 28, and 29 July 2026, hands-on.

Four bar their assistants from private windows outright. Two more show the user an AI control that will not work: Safari refuses to summarize and blames “something went wrong,” while Edge’s Summarize button does nothing at all. Only Firefox leaves its AI fully active, sending the private page to whichever frontier lab the user selected. Almost none of this, protective or exposing, is written down anywhere.

1 The lockout is now the norm.

Chrome, Brave, and Opera disable their page-reading assistants in private windows and document it. Comet excludes its Assistant on the current build, and Edge’s page AI, though still on screen, does nothing when invoked. Opera’s agentic Neon strips its AI surfaces too. We verified each of these in the running products. The lockouts cover the assistant, never the search box.

2 Firefox is the last unguarded path from a private page to a frontier lab.

Firefox’s sidebar offers Claude, ChatGPT, Gemini, Mistral, or Copilot. We examined the shipping code in Firefox 153: it packages selected text, page excerpt, tab title, and URL, and it contains no private-browsing check. The data goes to the chosen provider under that provider’s retention rules.

3 Products changed faster than the paperwork.

Comet’s Assistant now shuts off in Incognito; only the Incognito screen says so. Safari refuses to summarize private pages and calls it a transient fault. Edge offers Summarize in a private window and the button simply does nothing. Three vendors added protection in silence, and protection nobody wrote down can revert the same way it arrived.

4 The search pipe stays open in every private window.

Chrome’s Incognito address bar offers Google’s AI Mode. A query typed in an Edge InPrivate window returns an answer labeled “Copilot Search,” the same brand name as the assistant Microsoft withholds from that window. Comet routes address-bar queries to Perplexity. Locking out the assistant does not close the search channel, and no private-mode screen mentions the AI sitting behind it.

5 Courts punish silence.

Google settled a five-billion-dollar Incognito class action in 2024. Plaintiffs sued Perplexity in April 2026 and Apple in June 2026. Every action targets the gap between what users were told and what servers received. Edge, Comet, and Safari currently protect private windows, in whole or in part, without telling anyone; Firefox exposes them without telling anyone. We judge both silences carry the same legal pattern the courts have already priced.

Scope and method. This report covers only what AI changes about private browsing. Findings rest on vendor documentation, shipping product code, court records, and hands-on runs of current macOS builds on 27, 28, and 29 July 2026: Chrome 150.0.7871.187, Edge 150.0.4078.105, Firefox 153.0, Brave 149.1.91.175, Opera 133.0, Opera Neon 133.0, Comet 150.0.7871.228, Safari 26.5. Safari’s test compared the same article in normal and private windows on two Apple Intelligence-enabled Macs, one M1 and one M2. Allegations in pending litigation remain unproven. This is the edition of 29 July 2026; the final page records what changed and when.

Do AI Assistants Observe Private Sessions?

A browser assistant that reads the page and reports to vendor servers is a party that private mode never anticipated. Local traces vanish when the window closes. A server-side AI conversation containing the page does not. Seven browsers now give four answers.

Off by Design, Documented

VERIFIED IN PRODUCT

The page-reading assistant does not function in a private window, and the vendor says so in writing. Google documents the Gemini restriction twice. Opera documents the Aria lockout twice. Brave closed the request to change Leo's exclusion as "not planned." We confirmed all three lockouts on 27 July 2026: no assistant control appears in any of their private windows. The search box is a separate channel in all three, as Key Judgment 4 and page 04 describe.

Chrome · Gemini

Brave · Leo

Opera One · Aria

Off in the Product, Missing From the Paperwork

VERIFIED · UNDOCUMENTED

Comet: the current build turns the Assistant off in Incognito and states it on the Incognito screen itself. No policy document or help page has caught up, and the privacy notice still says Perplexity "may still be able to track you." **Edge:** an InPrivate window in reader mode offers Summarize, Explain, and Chat with Copilot. Clicking Summarize does nothing: no summary, no error, no notice. Copilot-branded AI answers searches typed in the same window. Microsoft documents none of it. **Safari, partially:** the same article summarized in a normal window and was refused in a private one with "something went wrong." Apple presents a privacy behavior as a transient fault. Translate still sends page content to Apple, per Apple's own disclosure.

Comet · Assistant

Edge · Copilot

Safari · Summarize

A pattern within the pattern. Safari and Edge both show a private-window AI control that will not work. Safari blames a transient fault; Edge says nothing at all. Neither documents the behavior.

On in Private Windows, Undocumented

AI OBSERVES PRIVATE SESSIONS

Firefox stands alone here. The AI sidebar functions in private windows exactly as in normal ones. The shipping code that builds its prompts from selected text, page excerpt, tab title, and URL contains no private-mode check; we verified this in the Firefox 153 build installed for this test. Every prompt goes to the third-party provider the user selected, under that provider's retention rules, and nothing in Mozilla's private-browsing documentation mentions any of it.

Firefox · AI sidebar

No Stated Position, Tested Anyway

SHIPS AN UNDOCUMENTED PRIVATE MODE

Opera Neon, Opera's subscription agentic browser, mentions private browsing nowhere in its FAQ or security blog. The product ships one anyway. File, then New Private Window, opens a window that strips every AI surface: no prompt box, no chat button, no model picker, and address-bar prompts route to a plain Google search. The screen reuses Opera One's disclosure. Nothing in Neon's documentation states what its agents may touch. Verified in product, 28 July 2026.

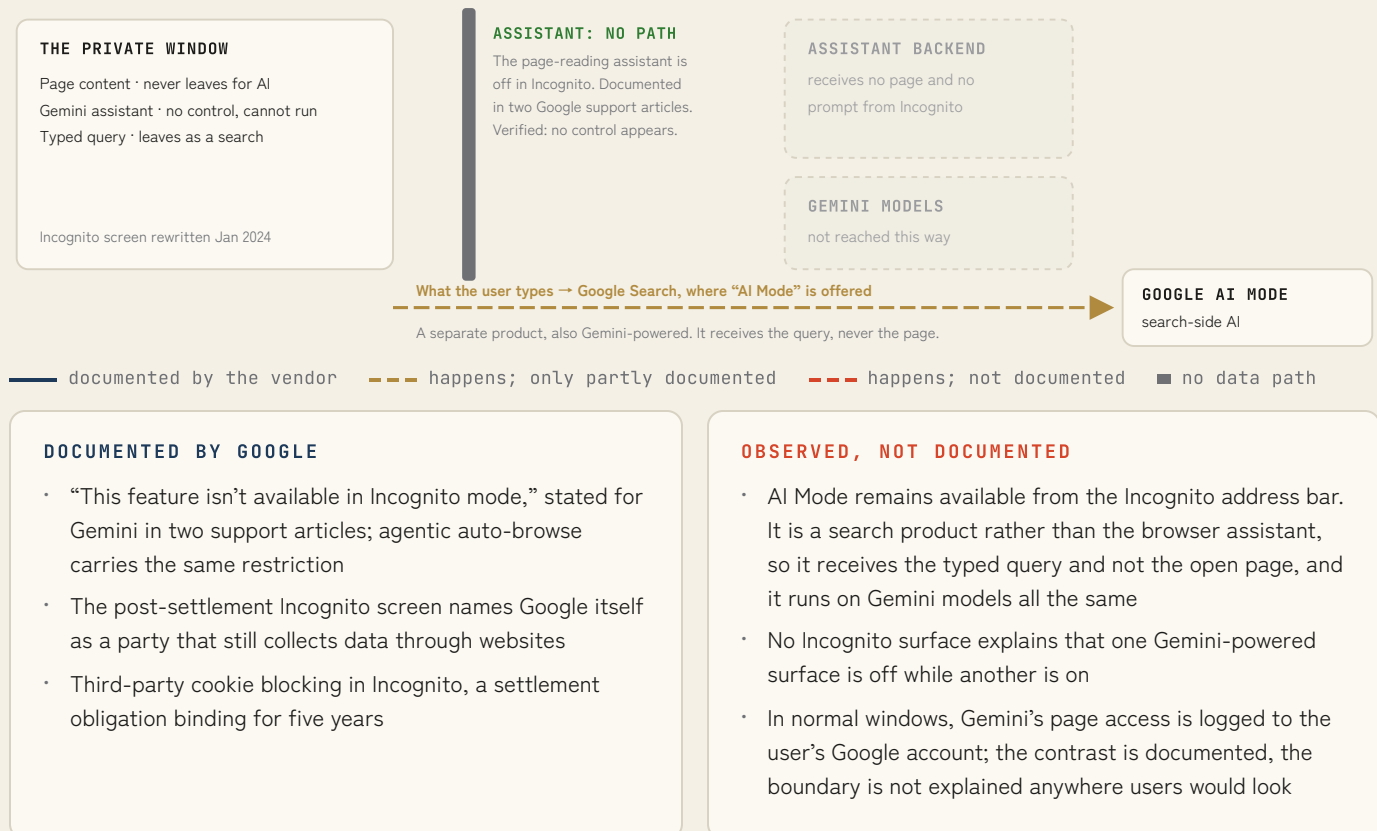
Opera Neon · agents

Assessment: the industry is converging on the lockout; the documentation is not. Three vendors wrote the rule down, three more curb AI in silence, and Firefox alone leaves the path open. The next seven pages trace each browser's private-window data flows and mark every flow as documented or not.

Google Chrome

Google · Chromium · largest browser worldwide · “Incognito”
VERIFIED IN PRODUCT · 27 JUL 2026 · v150.0.7871.187

We assess Chrome answers the assistant question cleanly and in writing: the Gemini assistant, which can read the open page, does not run in Incognito. A second AI surface remains: the address bar is a search box, and Google’s AI Mode accepts queries from it. Two distinct products, both built on Gemini models. Only the first one’s absence is documented.



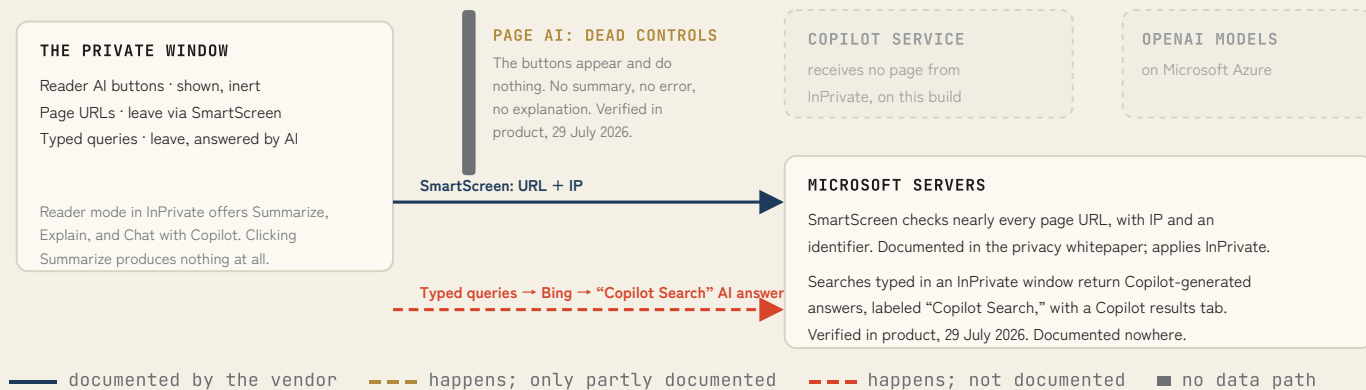
“This won’t change how data is collected by websites you visit and the services they use, including Google.”

Chrome Incognito screen. Wording verified in product, 27 July 2026.

Microsoft Edge

Microsoft · Chromium · second-largest desktop browser · “InPrivate”
VERIFIED IN PRODUCT · 27-29 JUL 2026 · v150.0.4078.105

We assess Edge presents Copilot controls inside InPrivate that do nothing when clicked. Reader mode offers Summarize, Explain, and Chat with Copilot in a private window; the buttons are inert. Meanwhile Copilot-branded AI answers searches typed in the same window. Microsoft documents none of it.



DOCUMENTED BY MICROSOFT

- The InPrivate screen names what the mode cannot do: hide browsing from school, employer, or internet provider
- SmartScreen URL checks, with IP and identifier, in the Edge privacy whitepaper
- Bing searches from InPrivate are not associated with the user’s account
- An InPrivate-only “Strict” tracking-prevention toggle exists, off by default; we verified it present on the current build

OBSERVED, NOT DOCUMENTED

- Reader mode in an InPrivate window presents Summarize, Explain, and Chat with Copilot. Clicking Summarize does nothing: no summary, no error, no statement that the feature is unavailable here
- Searches typed in the same window return AI answers labeled “Copilot Search,” alongside a Copilot tab in the results. One window, one brand name, one surface inert and another live, with nothing distinguishing them for the user
- No support article, release note, or whitepaper section states whether any Copilot surface operates in InPrivate
- Third parties reported the Copilot sidebar running inside InPrivate in December 2025; no announcement accompanied that behavior or any later change
- A normal-window session is Copilot-first by default: the new-tab page is a Copilot prompt that can reference open tabs and visited sites

In an InPrivate window Edge offers to summarize the page, and the button does nothing when clicked.

Q16 test, 29 July 2026. Microsoft publishes no sentence about Copilot in InPrivate to quote, in either direction.

Apple Safari

Apple · WebKit · default on roughly two billion devices · “Private Browsing”
VERIFIED IN PRODUCT · 27 JUL 2026 · Safari 26.5

We assess Safari curbs AI summarization in private windows and hides the curb behind a generic error message. The same article summarized in a normal window and was refused in private on both Macs we tested. Apple documents none of this on any surface, and its translation flow still sends page content to Apple.



DOCUMENTED BY APPLE

- Translation sends page content to Apple servers; in a private window Apple withholds the page address
- Private Cloud Compute’s no-retention design, in Apple’s security documentation
- The optional ChatGPT integration routes requests to OpenAI only with user consent

NOT DOCUMENTED

- The Summarize refusal in private windows: the control appears, the request fails, and the error blames a transient fault rather than stating a privacy behavior; reproduced on two Apple Intelligence-enabled Macs
- No Apple page states whether any Apple Intelligence feature observes Private Browsing
- No Apple surface, alone among the seven, tells users who can still see private-window activity; the start page makes only affirmative promises, and plaintiffs in *Simpson v. Apple* (June 2026) call the advertised privacy “illusory”

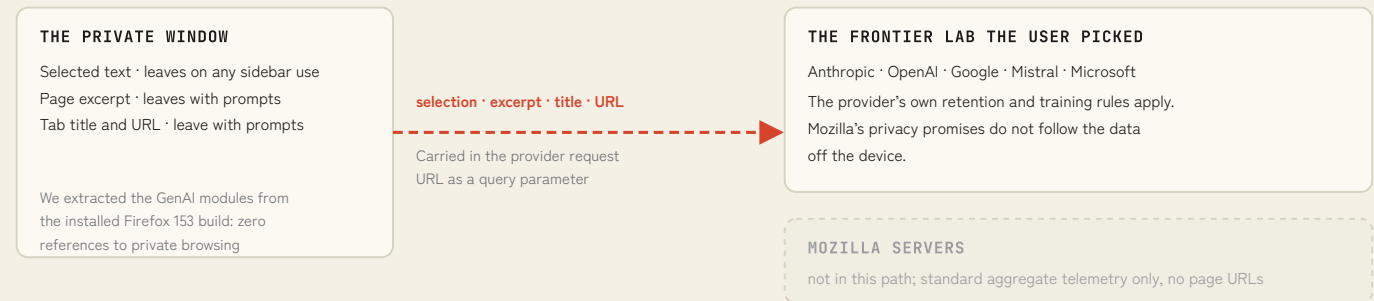
“Summarization Unavailable. Something went wrong while trying to summarize this page. Try again later.”

Safari, in a private window, on a page that summarizes without complaint in a standard window. Verified on two Macs, 27 July 2026.

Mozilla Firefox

Mozilla · Gecko · largest non-Chromium browser · “Private Browsing”
VERIFIED IN SHIPPING CODE · 27 JUL 2026 · v153.0

We assess Firefox is now the clearest private-window exposure of the seven. The shipping chatbot code contains no private-mode check, and prompts carry page data to whichever frontier lab the user selected, inside the request URL itself.



— documented by the vendor — happens; only partly documented - - - happens; not documented ■ no data path

DOCUMENTED BY MOZILLA

- Every private window links “Who might still be able to see my activity?” and a standing article names ISP, employer, and websites
- Private windows add tracker and fingerprinter blocking; Total Cookie Protection applies everywhere
- The chatbot feature itself, including its provider list, in Firefox support pages

OBSERVED, NOT DOCUMENTED

- Nothing states whether the sidebar operates in private windows; it does, ungated
- The code that builds chatbot prompts from selection, excerpt, title, and URL contains no private-browsing check; verified in the installed 153.0 build
- Prompts travel as URL query parameters, which providers routinely log server-side
- A page-summarization rollout was active on our test profile with no private-mode language attached

“It doesn’t make you anonymous to websites, your internet provider, your employer, or search engines.”

Mozilla support, “Common Myths about Private Browsing.” The AI sidebar appears nowhere in that article.

Brave

Brave Software · Chromium · 80 to 100 million users · “Private Window” · “Private Window with Tor”
 VERIFIED IN PRODUCT · 27 JUL 2026 · v149.1.91.175

We assess Brave resolved the assistant question early, in writing, and permanently: Leo does not run in private windows, and Brave closed the request to change that as “not planned.” The product matches the paperwork.

THE PRIVATE WINDOW

Leo prompt · impossible, no control
 Page content · never leaves for AI

Full Shields run everywhere: ad and
 tracker blocking, fingerprint
 randomization; optional Tor windows

LEO: NO PATH

Off in Private and Tor windows.
 Documented; change request
 closed “not planned,” Jan 2026.
 Verified: no Leo control
 appears, 27 Jul 2026.

BRAVE PROXY

receives nothing from
 private windows

MODEL PARTNERS

Idle for this window

Normal windows: Leo runs through an anonymizing proxy, retains no
 server-side conversations, trains on nothing, and its tab features
 exclude private-window tabs explicitly. All documented.

— documented by the vendor — happens; only partly documented - - - happens; not documented ■ no data path

DOCUMENTED BY BRAVE

- The private-window screen itself names the ISP, passive network observers, and employers as parties who may still see activity
- Leo’s exclusion from private windows, in the product and in the closed GitHub request
- Brave’s own caveat that its Tor windows are weaker than Tor Browser, with a public bug tracker of known leaks

OBSERVED, NOT DOCUMENTED

- Nothing material. Brave’s private-window behavior matched its documentation at every point we tested
- Historical note: .onion DNS leak in 2021, fixed the day it became public and documented afterward

“Note that your activity could still be visible to your internet service provider, passive network observers, or your employer.”

Brave private-window screen. Wording verified in product, 27 July 2026.

Opera

Opera · roughly 72% owned by Kunlun Tech (China); data controller in Norway · “Private Window”
VERIFIED IN PRODUCT · 27–28 JUL 2026 · Opera One and Neon, both v133.0

We assess Opera One documents its AI lockout and the product matches it. Opera Neon, the paid agentic browser, publishes no private-mode position yet ships a private mode that strips its AI surfaces. The product runs ahead of the paperwork twice over.

THE PRIVATE WINDOW

Aria prompt · impossible, no control
Page content · never leaves for AI

Private screen states the limit plainly:
the mode only hides activity from
others using Opera on this device

ARIA: NO PATH

“No, Opera AI is not available
in a private window.” Documented
twice. Verified: the AI button
vanishes in private windows,
27 Jul 2026.

OPERA SERVERS

Aria receives nothing
from private windows

OPENAI · GOOGLE

Aria’s backends,
idle for this window

Normal windows: Aria routes prompts to OpenAI or Google
automatically, retention up to 365 days for signed-in users.
Documented in Opera’s AI privacy pages.

— documented by the vendor - - - happens; only partly documented - - - happens; not documented ■ no data path

DOCUMENTED BY OPERA

- The Aria lockout, in two official help pages, matching the product
- The private-window screen’s one-device scope statement, shown on every private window
- The free VPN’s browser-only scope and its Deloitte-audited no-log claim

NOT DOCUMENTED

- Opera Neon, the agentic browser that executes tasks on live websites, mentions private browsing nowhere in its FAQ or security blog, yet ships one: File, then New Private Window
- Neon’s private windows strip the AI surfaces: no prompt box, no chat button, no model picker; address-bar prompts route to a plain Google search. Verified in product, 28 July 2026, v133.0
- Neon’s private screen reuses Opera One’s wording; nothing Neon-specific states what its agents may touch in any mode
- Neon’s private searches travel directly to Google with the user’s real IP address; the VPN sits off by default and cannot be enabled from the private window itself. Opera-bound crash and usage telemetry defaults to on

“Private mode only hides your browsing activity from others using Opera on this device.”

Opera private-window screen. Wording verified in product, 27 July 2026.

Perplexity Comet

Perplexity AI · Chromium · leading AI-native browser · “Incognito”
 VERIFIED IN PRODUCT · 27 JUL 2026 · v150.0.7871.228

We assess Comet reversed course in 2026. The current build turns the Assistant off in Incognito and states it on the Incognito screen itself. Perplexity’s policy documents have not caught up with Perplexity’s product.

THE PRIVATE WINDOW

Assistant prompt · impossible, no control
 Tab content · never leaves for AI
 Address-bar query · leaves as search

Incognito screen: Assistant off, Personal
 Search disabled, third-party cookies
 blocked. All verified on screen.

ASSISTANT: NO PATH

Stated on the Incognito screen
 itself; button absent, verified.
 Not yet stated in the privacy
 notice or help center.

ASSISTANT BACKEND

receives nothing from
 Incognito, on this build

FRONTIER MODELS

GPT · Claude · Gemini,
 idle for this window

Address-bar searches → Perplexity, the default engine

PERPLEXITY SERVERS

Search queries reach Perplexity in every mode.
 Privacy notice: Perplexity “may still be able to track you.”

— documented by the vendor - - - happens; only partly documented - - - happens; not documented ■ no data path

DOCUMENTED BY PERPLEXITY

- On the Incognito screen: the Assistant is off, Personal Search is disabled, third-party cookies are blocked, and incognito does not hide users from sites, networks, or cookieless trackers
- In the privacy notice: Perplexity and third parties “may still be able to track you” in incognito
- Normal-window architecture: Assistant queries transfer the current tab and relevant history to Perplexity, then onward to the selected frontier model

OBSERVED, NOT DOCUMENTED

- The Assistant lockout appears in no policy document, help-center page, or announcement; the Incognito screen is its only written record
- The change from earlier 2026 behavior, when no exclusion was promised anywhere, was never announced
- An April 2026 class action alleges the search product’s incognito was a “sham”; the allegation is unproven and predates this build

“The Assistant is turned off — you won’t see the Assistant button and won’t be able to ask contextual questions about pages.”

Comet Incognito screen, punctuation original. Verified in product, 27 July 2026.

Seven Browsers and Neon, Side by Side

BROWSER	ASSISTANT	IN PRIVATE WINDOWS	AI-BOUND DATA LEAVING THE DEVICE IN PRIVATE	WHERE THE AI BEHAVIOR IS DOCUMENTED	HANDS-ON VERIFIED
Chrome	Gemini	OFF	Search and AI Mode queries typed in the address bar	Lockout: two support docs. AI Mode's presence: nowhere	In product, 27 Jul
Edge	Copilot	PAGE AI SHOWN BUT DEAD; SEARCH AI LIVE	SmartScreen URLs with IP; typed queries answered by Copilot Search	Nowhere, in either direction	In product, 27–29 Jul
Safari	Apple Intelligence	SUMMARIZE REFUSED; TRANSLATE FLOWS	Page content via Translate; URL withheld	Translation disclosure only; the Summarize curb: nowhere	In product, two Macs, 27 Jul
Firefox	Chatbot sidebar	ON, UNGATED	Selection, excerpt, title, URL to the chosen frontier lab	Nowhere; shipping code has no check	Shipping code, 27 Jul
Brave	Leo	OFF	Nothing AI-bound	Product screens and closed GitHub request	In product, 27 Jul
Opera One	Aria	OFF	Nothing AI-bound	Two help pages	In product, 27 Jul
Opera Neon	Neon agents	AI SURFACES REMOVED	Address-bar queries go to Google with the user's IP; VPN off by default	Nowhere; the private mode itself is undocumented	In product, 28 Jul
Comet	Assistant	OFF, NEW THIS CYCLE	Address-bar searches to Perplexity	The Incognito screen only; policy documents lag	In product, 27 Jul

PATTERN

The industry is converging on excluding assistants from private windows. Documentation is not converging with it. Three vendors wrote the rule down. Three enforce full or partial curbs without a written word, and Safari's curb masquerades as an error. Firefox alone leaves AI ungated. The private-window screen, not the privacy policy, has become the only reliable record of vendor behavior, and only sometimes.

ANALYTIC NOTE

Both vendors facing 2026 private-mode lawsuits, Apple and Perplexity, were sued over disclosure, not architecture. Perplexity has since moved to the protective end of the spectrum while its policy language stands still. We judge documentation debt, not data flow, is the live legal exposure, and four of seven vendors are carrying it.

Private Mode in the Courts

2020–2024

Brown v. Google. A class action valued near five billion dollars over Chrome Incognito tracking ends in settlement: rewritten disclosures, deletion of billions of records, and five years of mandatory third-party cookie blocking.

Dec 2023

Saeedy v. Microsoft dismissed. An InPrivate data-flow suit fails on standing. No court has examined the merits.

Apr 2026

Perplexity sued. A class action calls the search product’s incognito a “sham,” alleging server-side trackers ignored the mode. The allegation is unproven and predates the Comet build we tested.

Jun 2026

Apple sued. Plaintiffs call Safari’s advertised privacy “illusory,” targeting the one vendor that publishes no limits disclosure at all and no AI position.

Recommendations for Users

1 • Do not invoke AI features on a sensitive page in any private window. In Firefox the page goes to a frontier lab. In Safari, Translate still sends content to Apple. The page outlives the window.

2 • Prefer vendors that document their lockout. Chrome, Brave, and Opera One put it in writing. Edge and Comet currently behave well without a written commitment to hold them to.

3 • Treat the address bar as a public channel in every private window. Searches, including Chrome’s AI Mode queries, reach the search engine’s AI infrastructure in every mode.

4 • Re-verify after every major browser update. Two of seven browsers changed their private-window AI behavior inside seven months without announcing it in either direction.

Q16 Frontier Watch rates the privacy of AI apps, all the way down.

Every consumer AI app, traced through the hosting layer to the model provider behind it. Independent, methodology-first, free to read.

watch.q16pbc.com • Methodology and disputes: q16pbc.com

REVISION HISTORY

28 July 2026 — first edition. Seven browsers, plus Opera Neon, tested hands-on.

29 July 2026 — Edge revised. The first edition reported Copilot absent from InPrivate, having checked only the toolbar and new-tab page. Further testing found its AI controls present in reader mode and inert when clicked, and Copilot-branded AI answering searches in the same window. The Chrome page was clarified to distinguish the Gemini assistant from AI Mode, a separate search product on the same models.