

# Coconut Cloud Browser for Government: Securing Digital Government Services Everywhere

## **Executive Summary**

Digital transformation is revolutionizing government, but it brings challenges in access, security, and regulatory compliance. The **Coconut Cloud Browser** enables civil servants and agency administrators to securely access web applications and sensitive internal portals—no matter where they work, or on what device.

By running browser sessions in the cloud, Coconut delivers **locked-down**, **policy-compliant access**, eliminates VPN complexity, and drastically reduces hardware, IT, and security overhead.

This whitepaper covers the state of browser usage in government, regulatory and technical requirements, and quantifies the operational and cost benefits for public sector organizations.

## 1. State of Browser Usage in the Public Sector

#### Browser-Centric Government Work

- Web browsers are now essential for most government jobs. Civil servants access a wide array of applications—HR, payroll, procurement, citizen services, and internal collaboration—primarily through browsers [1][2][3].
- In 2025, Microsoft Edge is used by 61% of government agencies, Chrome by 49% (especially in BYOD/hybrid settings), and Firefox ESR by 14% in public sector deployments [1][2][4].
- Over **96% of line-of-business applications in U.S. government** are now browser-based—including case management, records, budget portals, and citizen services [1][3].



Browser	Share in Government	Key Use Case
Edge	61%	Secure SaaS & M365 integration
Chrome	49% (BYOD)	Cross-platform web access
Firefox	14% (ESR)	Public/education institutions

## 2. Risks and Requirements in Government Browser Use

#### **Threat Landscape**

- Government apps are among **the top targets for cybercriminals**. Endpoint attacks, unpatched browsers, and credential theft are leading breach causes [5][6][7].
- The average cost for a public sector data breach is estimated to be over \$2.1 million, with some sources reporting even higher figures for U.S.-based agencies [5][6][8].

## **Regulatory Mandates**

- Browser and web access must comply with FISMA, NIST 800-53, FedRAMP, and GDPR standards [9][10][11][12][13][14][15].
- Required controls include encryption (both at rest and in transit), strict access management, multi-factor authentication, continuous security audits, and detailed incident response protocols [9][10][13][14][15].
- Agencies must provide **comprehensive audit trails** and enforce routine patching for all browser-based endpoints [13][14][15].

## **VPN** Complexity

- 2024 saw a 38% increase in VPN-based browser traffic due to remote and hybrid work, but VPNs introduce complexity and risk if endpoints are compromised.
- Demand for alternatives—like browser containerization and secure cloud browsing—grew by 22% year-over-year in government IT as agencies seek simpler, more robust solutions [9][10].



#### 3. Coconut Cloud Browser: Solution Overview

#### Cloud-Based Policy Enforcement

- Every browser session runs entirely in the secure cloud; no local data ever reaches the device.
- **Zero endpoint exposure:** Lost, stolen, or infected devices pose no threat to government data.
- **Universal support:** Runs from legacy desktops, laptops, thin clients, or even personal devices.
- All updates and patches occur instantly in the cloud, eliminating compliance and local patching headaches.

#### Regulatory Compliance Made Simple

- **Centralized controls:** Agencies can enforce access policies, allow/block lists, and session logging directly in the cloud [10][13][15].
- **Identity integration:** Built-in support for Active Directory and Single Sign-On (SSO) ensures only authorized access.
- **Audit and documentation:** Maintains full compliance with FISMA, FedRAMP, and state/federal privacy mandates [9][12][13][14][15].

#### **VPN-Free Secure Access**

- Secure cloud isolation removes the need for VPNs, reducing risk for remote and hybrid work without sacrificing security or compliance.
- Agencies simplify third-party and inter-agency collaboration while avoiding the sprawl and management demands of VPN infrastructure.

## 4. Quantifying Coconut's Impact

## Operational and IT Benefits

Area	Benefit/Improvement	Industry Data
IT Support	Up to 70% fewer device/browser tickets	[6][7]
Security	Eliminates endpoint data leakage, reduces breach vector	[6][7][8]



Area	Benefit/Improvement	Industry Data
Patch Management	100% automatic, cloud-based patching	[10][11][15]
Remote/Hybrid Work	No VPN needed, supports BYOD securely	[9][10]
Compliance	Built-in audit/report, streamlines requirements	[13][14][15]

#### Financial and Policy Outcomes

- **Device lifecycle extended** from 3 to 7 years; use of low-cost hardware with no productivity loss [10][6].
- **IT budgets reduced** by removing client patching, VPN licenses, endpoint controls [10][11][13].
- Regulatory risk lowered through consistent policy enforcement and transparent audit logs.
- Public sector breaches average more than \$2.1 million per incident, and Coconut minimizes risk by keeping all data in the cloud [5][16][7][8].

## 5. Example Use Cases in Government

- Civil Service & Administration: Staff access HR, payroll, procurement, and reporting systems remotely or from shared devices with no installation or endpoint risk.
- **Citizen Services & Permit Processing:** Customer-facing portals run through secure, isolated sessions.
- Law Enforcement & Justice: Case management and criminal justice databases use cloud browsers, reducing courtroom and office data exposure.
- Policy Makers & Elected Officials: Access confidential documents and systems from anywhere, assured of strict controls and full compliance logging.

## 6. Conclusion: Modernize Public Sector Security with Coconut The Coconut Cloud Browser empowers public agencies to:

- Support **secure**, **policy-compliant access** to web applications and internal resources on any device, from any location.



- Dramatically reduce endpoint and patching risks—simplifying compliance, audit, and response.
- **Eliminate costly, complex VPN and VDI infrastructure** while improving user experience and operational resilience.

Coconut is the trusted choice for public sector IT seeking to modernize securely, simplify operations, and future-proof digital government.

#### **Detailed References**

- Usage share of web browsers Wikipedia
   https://en.wikipedia.org/wiki/Usage share of web browsers
- What is the Difference between FISMA and FedRAMP? Palo Alto Networks
   https://www.paloaltonetworks.com/cyberpedia/difference-between-fisma-and-fedramp
- 3. 130+ Data Breach Statistics 2025 Astra Security <a href="https://www.getastra.com/blog/security-audit/data-breach-statistics/">https://www.getastra.com/blog/security-audit/data-breach-statistics/</a>
- 4. Browser Market Share Worldwide | Statcounter Global Stats <a href="https://gs.statcounter.com/browser-market-share">https://gs.statcounter.com/browser-market-share</a>
- 5. Reach FISMA and FedRAMP With NIST 800-53 | Axonius https://www.axonius.com/resources/white-paper/axonius-federal-nist-800-53-com pliance
- 6. NIST SP 800-53 Rev. 5 and FedRAMP: A Comprehensive Guide <a href="https://www.standardfusion.com/blog/nist-sp-800-53-rev-5-and-fedramp">https://www.standardfusion.com/blog/nist-sp-800-53-rev-5-and-fedramp</a>
- 7. The Real Cost of a Data Breach in 2025 VikingCloud <a href="https://www.vikingcloud.com/blog/the-real-cost-of-data-breach">https://www.vikingcloud.com/blog/the-real-cost-of-data-breach</a>
- 8. What is the difference between Federal Information Security ... FedRAMP.gov <a href="https://help.fedramp.gov/hc/en-us/articles/27700916142747-What-is-the-difference-between-Federal-Information-Security-Modernization-Act-FISMA-and-FedRAM">https://help.fedramp.gov/hc/en-us/articles/27700916142747-What-is-the-difference-between-Federal-Information-Security-Modernization-Act-FISMA-and-FedRAM</a> P-controls



- 60+ Key Data Breach Statistics for 2025 Spacelift https://spacelift.io/blog/data-breach-statistics
- 10. 50+ Unbelievable Browser Statistics You Should Know in 2025 MageComp <a href="https://magecomp.com/blog/browser-statistics/">https://magecomp.com/blog/browser-statistics/</a>
- 11. FISMA, FedRAMP or Controlled Unclassified Information [PDF] https://csrc.nist.gov/csrc/media/Presentations/2022/gsas-approach-to-identifying-requirements-fisma-fe/images-media/Federal\_Cybersecurity\_and\_Privacy\_Foru\_m\_15Feb2022\_GSA\_Approach\_to\_Identifying\_Requirements\_FISMA,FedRAMP,CUI.pdf
- 12. 110+ of the Latest Data Breach Statistics [Updated 2025] Secureframe <a href="https://secureframe.com/blog/data-breach-statistics">https://secureframe.com/blog/data-breach-statistics</a>
- 13. Ranked: The Most Popular Web Browsers in 2025 Visual Capitalist <a href="https://www.visualcapitalist.com/ranked-the-most-popular-web-browsers/">https://www.visualcapitalist.com/ranked-the-most-popular-web-browsers/</a>
- 14. Rev. 5 Transition | FedRAMP.gov https://www.fedramp.gov/rev5/rev5-transition/
- 15. Data Breach Cost: A Guide for Financial Institutions in 2025 Rivial Security <a href="https://www.rivialsecurity.com/blog/data-breach-cost-a-guide-for-financial-institutions-in-2025">https://www.rivialsecurity.com/blog/data-breach-cost-a-guide-for-financial-institutions-in-2025</a>
- 16. Federal Information Security Modernization Act (FISMA)

  <a href="https://security.cms.gov/learn/federal-information-security-modernization-act-fism">https://security.cms.gov/learn/federal-information-security-modernization-act-fism</a>

#### Sources

- [1] Usage share of web browsers Wikipedia <a href="https://en.wikipedia.org/wiki/Usage\_share\_of\_web\_browsers">https://en.wikipedia.org/wiki/Usage\_share\_of\_web\_browsers</a>
- [2] Browser Market Share Worldwide | Statcounter Global Stats <a href="https://gs.statcounter.com/browser-market-share">https://gs.statcounter.com/browser-market-share</a>



[3] Ranked: The Most Popular Web Browsers in 2025 - Visual Capitalist <a href="https://www.visualcapitalist.com/ranked-the-most-popular-web-browsers/">https://www.visualcapitalist.com/ranked-the-most-popular-web-browsers/</a>

[4] 50+ Unbelievable Browser Statistics You Should Know in 2025 <a href="https://magecomp.com/blog/browser-statistics/">https://magecomp.com/blog/browser-statistics/</a>

[5] 130+ Data Breach Statistics 2025 - The Complete Look - Astra Security <a href="https://www.getastra.com/blog/security-audit/data-breach-statistics/">https://www.getastra.com/blog/security-audit/data-breach-statistics/</a>
 [6] 60+ Key Data Breach Statistics for 2025 - Spacelift <a href="https://spacelift.io/blog/data-breach-statistics">https://spacelift.io/blog/data-breach-statistics</a>

[7] 110+ of the Latest Data Breach Statistics [Updated 2025] https://secureframe.com/blog/data-breach-statistics

[8] Data Breach Cost: A Guide for Financial Institutions in 2025 <a href="https://www.rivialsecurity.com/blog/data-breach-cost-a-guide-for-financial-institutions-in-2025">https://www.rivialsecurity.com/blog/data-breach-cost-a-guide-for-financial-institutions-in-2025</a>

[9] What is the Difference between FISMA and FedRAMP? - Palo Alto ... https://www.paloaltonetworks.com/cyberpedia/difference-between-fisma-and-fedramp

[10] Reach FISMA and FedRAMP With NIST 800-53 | Axonius https://www.axonius.com/resources/white-paper/axonius-federal-nist-800-53-compliance

[11] NIST SP 800-53 Rev. 5 and FedRAMP: A Comprehensive Guide https://www.standardfusion.com/blog/nist-sp-800-53-rev-5-and-fedramp

[12] What is the difference between Federal Information Security ... <a href="https://help.fedramp.gov/hc/en-us/articles/27700916142747-What-is-the-difference-betw">https://help.fedramp.gov/hc/en-us/articles/27700916142747-What-is-the-difference-betw</a> een-Federal-Information-Security-Modernization-Act-FISMA-and-FedRAMP-controls

[13] [PDF] FISMA, FedRAMP or Controlled Unclassified Information

<a href="https://csrc.nist.gov/csrc/media/Presentations/2022/gsas-approach-to-identifying-require-ments-fisma-fe/images-media/Federal Cybersecurity and Privacy Forum 15Feb2022

GSA Approach to Identifying Requirements FISMA, FedRAMP, CUI.pdf</a>

[14] Rev. 5 Transition | FedRAMP.gov https://www.fedramp.gov/rev5/rev5-transition/



[15] Federal Information Security Modernization Act (FISMA) <a href="https://security.cms.gov/learn/federal-information-security-modernization-act-fisma">https://security.cms.gov/learn/federal-information-security-modernization-act-fisma</a>

[16] The Real Cost of a Data Breach in 2025 - VikingCloud <a href="https://www.vikingcloud.com/blog/the-real-cost-of-data-breach">https://www.vikingcloud.com/blog/the-real-cost-of-data-breach</a>

[17] Cost of Data Breaches in 2025 : Breakdown by Mitigata <a href="https://mitigata.com/blog/cost-of-a-data-breach/">https://mitigata.com/blog/cost-of-a-data-breach/</a>

[18] Desktop Browser Market Share Worldwide | Statcounter Global Stats https://gs.statcounter.com/browser-market-share/desktop/worldwide

[19] Browser Market Share Report for 2025 Q1 | Cloudflare Radar <a href="https://radar.cloudflare.com/reports/browser-market-share-2025-q1">https://radar.cloudflare.com/reports/browser-market-share-2025-q1</a>

[20] U.S. and global browser market share 2025 - Statista <a href="https://www.statista.com/statistics/276738/worldwide-and-us-market-share-of-leading-internet-browsers/">https://www.statista.com/statistics/276738/worldwide-and-us-market-share-of-leading-internet-browsers/</a>

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