The Island Enterprise Browser: An e-Discovery friendly BYOD Solution for Agencies and Their Users

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Introduction

Agencies have long struggled with implementing effective BYOD policies due to concerns over data leakage, user privacy, device identification, and regulatory compliance. Traditional solutions such as mobile device management (MDM), virtual desktop infrastructure (VDI), and virtual private networks (VPNs) are often complex to manage and cumbersome for end-users to enroll a new device. Many BYOD programs have failed to reach widespread adoption due to the classic Goldilocks problem: a light touch approach is more appealing for end-users, but leaves data and devices largely unprotected. The more intensive management controls that expand data protection do so at a cost to user privacy, convenience, and ultimately, user acceptance.

The Island Enterprise Browser offers a viable path that's just right for both agency IT and security staff and the end-users they aim to protect. Island's policy-based governance and last-mile controls ensure agency data is protected without requiring total control of the device and its personal data.

Challenges with Traditional BYOD Solutions

The challenges associated with traditional BYOD solutions can be categorized into three main areas:

- The mechanics of BYOD access
- Protecting application data against leakage
- Ensuring user privacy and anonymity

Deploying and managing BYOD access with traditional solutions is a complex and cumbersome process. Implementing VPN clients, for instance, requires significant overhead and often results in backhauling all traffic through a VPN concentrator, which degrades network performance. Further, most organizations do not want to allow unmanaged devices to connect to their internal agency networks. MDM technologies, while useful for managing devices, are extremely limited in managing actions or data within applications. MDM can also be quite invasive on a personal device — granting IT the ability to redirect network traffic for inspection or remotely wipe a personal device is a hard pill to swallow for the average employee or contractor. Finally, VDI adds significant cost and operational overhead, particularly when used only for delivering web applications.

In addition, existing policies often focus on user identity rather than device posture, which limits dexterity in policy enforcement. Effective policy decisions require a clear distinction between managed devices and BYOD, including granular inspection of the device's security posture. For example, it's wise to consider the current operating system patch level and disk encryption status before allowing access to sensitive applications and content.

One of the main concerns for organizations implementing a BYOD policy is the potential for untraceable application data leakage. Traditional data loss prevention solutions are often unable to assert themselves on unmanaged devices. Further, these solutions may be limited in protecting data from being copied, downloaded, or even shared through screenshots. The same sharing features that make apps convenient also open the door to easy data exfiltration. Setting aside intentional data leakage, residual data left behind on unmanaged devices from downloads cannot be easily detected or controlled. This inability to distinguish between work and personal personas on the same device leads to cross-contamination of personal and agency data.

Maintaining user privacy and anonymity in a BYOD environment is also crucial, but it can be difficult to achieve with traditional solutions. Traffic backhauling sends personal user data through corporate inspection and logging, which results in privacy issues and non-compliance with data sovereignty regulations. Even mundane details like the list of installed apps on a mobile device could reveal personal details about a user that they want to keep private. Moreover, agency data shared without appropriate controls can cause unintended data leakage or regulatory and privacy concerns. Agencies must ensure that they can safely store and revoke data according to a combination of executive orders, framework requirements, and classification or sensitivity. The tradeoffs on both sides of BYOD and privacy can be quite daunting.

The Island Enterprise Browser: A Comprehensive Solution for BYOD Management

Island the Enterprise Browser offers a more streamlined and effective approach for agency BYOD programs. By installing the Island Browser and logging in with agency credentials, users can easily access and use agency applications without compromising security or privacy.

Island simplifies the provisioning process for BYOD through easy browser installation and agency login via a single-sign-on provider, which significantly reduces the complexity overhead associated with VPN, VDI, and MDM. For the user, it's no different than installing a web browser – a task that virtually all users are familiar with. Yet behind the scenes, Island decreases risk by identifying device characteristics like operating system patch level, encryption status, geolocation, and application destination and governing access based on these criteria. Data leakage from app interactions is stopped with last-mile controls that prevent risky actions such as copying and pasting data in unwanted destinations, screenshotting sensitive data, or saving files to a personal device. User workflows and productivity are maintained by seamlessly redirecting downloads to secure storage (typically the agency's OneDrive).

Island also ensures user privacy by separating personal and work interactions. Users can choose the browser of choice for personal use, while redirecting all work applications to open through Island. By segregating personal and corporate personas, Island audits only agency-specific actions and maintains compliance with regulatory requirements. This strikes the perfect balance between securing agency resources and the user's privacy in a BYOD world.

However, BYOD in federal agencies comes with a different pitfall - enabling e-Discovery for actions taken on an employee-owned device. The challenge lies in balancing privacy with agency compliance, especially when personal devices are used for work-related activities. Federal e-Discovery laws require agencies to produce relevant electronic information during legal proceedings. In BYOD scenarios, this can blur the lines between personal and agency data, potentially exposing employees' private information to legal scrutiny. Agencies must find ways to isolate agency data from personal data to ensure compliance without infringing on employee privacy. The Island Enterprise Browser offers a transformative solution, enabling agencies to address these challenges effectively while maintaining security, control, and compliance.

Facilitating e-Discovery while preserving user privacy

The Island Enterprise Browser is designed to create a secure, isolated environment for work-related activities, making it an ideal tool for addressing e-Discovery challenges in BYOD environments. By implementing Island, agencies can:

Isolate Agency Data

The browser ensures that all agency data and activities are contained within its secure environment, separate from the personal data on the device. This isolation prevents agency information from being stored locally on the device, reducing the risk of personal data being subject to e-Discovery.

Centralize Data Management

Agency data accessed through the Island Enterprise Browser is stored in secure, centralized repositories rather than on the BYOD device itself. This centralization ensures that e-Discovery requests can be fulfilled without accessing the physical device, keeping personal data out of scope.

Enforce Granular Policies

Island enables agencies to implement strict access controls and data governance policies for government workflows. Last-mile controls govern file downloads, copy and paste, screenshots, screensharing, printing and more, ensuring sensitive agency information remains protected and isolated within the browser environment.

Enable Remote Control

IT administrators can remotely manage and govern agency data within the browser, including changing access privileges when the device's security posture changes and ensuring no agency data is saved locally on personally owned devices.

Simplify Compliance

By centralizing agency activity logs and data within the browser, agencies can streamline compliance with federal e-Discovery requirements, including flexible logging for agency versus personal activities. All agency activities can have non-repudiation banners and 'OK' buttons. This allows the BYOD device itself to remain outside the scope of legal discovery, protecting employee privacy.

Building Trust Through Transparency

Implementing Island also provides an opportunity to educate employees about BYOD policies and the browser's functionality. Clear communication about how agency data is isolated and personal data remains private fosters trust and encourages compliance with organizational policies.

Conclusion

The Island Enterprise Browser offers a comprehensive and viable solution for implementing and managing agency BYOD policies. By addressing the challenges associated with traditional BYOD solutions and providing additional value in terms of security and privacy, Island offers a seamless and efficient approach to BYOD management. Its capabilities, such as simplified provisioning, data leakage control, and user privacy, make Island a viable option for agencies seeking to reap the benefits of BYOD without compromising security, while protecting personal devices from e-Discovery.

In short, Island achieves the just-right approach to BYOD management, offering organizations a viable, robust, and user-friendly solution to address the challenges and complexities of traditional BYOD implementation.