EDITORIAL BRIEF

Adding Robotic Process Automation Empowers Enterprise Browsers

Browser-based RPA delivers creative solutions for unique enterprise use cases

By Murali Raju
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As any web application is built, it is the application developers who are charged with building functional capabilities which meet a wide array of needs. Obviously, many applications are written for use within the enterprise, while others apply to needs in the consumer space. The design and implementation are created to benefit the most people in the target audience or deliver capabilities for specific tactical needs of the moment.

While some applications provide a degree of easy application customization, most SaaS and internal applications are rigid in nature. Certainly, one can make pleas to the provider of a SaaS technology to add a needed capability. And within internal web applications, the organization can try to convene the team of developers who originally built the application to make the desired changes.

In either case, one thing is clear, design teams and developers simply cannot foresee the specific needs of every organization that uses their technology in the future. As any application gains traction and usage, there may be countless cases where unique workflows are desired or additional security capabilities are needed and not available. Let's take a closer look at how approaching this issue at the browser level instead can dramatically change the calculus for organizations seeking to introduce new application workflows, capabilities, and security controls much more simply.

Integrating Automation into the Browser

The concept of integrating automation into the browser opens the possibility of unique governance and control that can be asserted over a SaaS or internal web application like never before. This includes control over such things at the last mile as copy/paste, printing screens, screen captures, saving content, etc. In addition, it can ensure that all activities by any user in particular application areas can be deeply logged for future forensic and auditing needs.

The introduction of automation scripts within the enterprise browser allows the organization to easily add new capabilities over any web-based application. These modules can be used across a variety of applications and associated data to easily add productivity and security capabilities. This means application developers do not have to modify internal applications for simple needs, and the wait for a SaaS provider to respond to specific needs can be avoided.

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To make this more tangible, let's review some examples of how this works in practice:

- To protect sensitive data, RPA in the browser can mask credit card data by combining web content for displayed credit card numbers and redacting them within the presentation layer.
- To deter camera-based theft of on-screen data, a module can inject a built-in watermark over a page to show the name of the logged-in user or other information pertinent to identifying the individual taking the data.
- To ensure a deeper level of application authentication, an automation script can be used to inject multi-factor authentication within any page of any SaaS or even legacy internal application.

In any of these cases, the altered workflows require zero modifications to the actual application. Instead, these actions are initiated within the browser. Further, these examples represent just a handful of the near-limitless ways automation scripts in the browser can enhance security and efficiency use cases across a business.

Ultimately, the value of taking a browser-based approach to add automation is that it empowers the organization to embed their own workflows into any web-based application without requiring any application changes by the provider. It moves the automation from the backend to the frontend – a s hift that can lead to massive resource savings, vastly greater flexibility, and limitless use-cases.

Four Key Application Enhancements Enabled via Browser-Based Automation

It's important to recognize that this novel approach is different from anything introduced before. It extends the application in ways that were previously unimaginable. Many of these application enhancements can be organized within four categories:

1. Governance. A browser with RPA can help govern data, app access and facilitate safe browsing.
2. Security. A browser-based approach allows a user to implement new multi-factor authentication (MFA) layers and create myriad other new security enhancements through automation.
3. Productivity. Automation scripts can introduce substantial new efficiencies via standardization/rationalization within application fields or processes.
4. Application performance monitoring. Browser-based RPA allows for easy universal monitoring of any application instead of requiring application modification to insert monitoring scripts.

The Unlimited Benefits of Browser-Based RPA

One of the best attributes of RPA scripts is that they are open-ended and can do almost anything. They allow for imagination of new unique use-cases that no vendor or technology would know to consider for your organizational needs by using conventional JavaScript, it becomes simple to write new scripts that are targeted to satisfy specific organizational requirements, avoiding the complications that could arise with backend development or third-party engagement.

And once your team uses this new approach to govern and control the unique elements of your organization, you can ultimately gain far more freedom and flexibility. This level of control gives organizations the latitude they require to really open their operations in ways that would be impossible otherwise.

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Conclusion

Using a browser that is specifically built for the enterprise is an indispensable tool for modern organizations. However, when you consider the immense extensibility that browser-based RPA can provide, it ensures that any organization's unique application needs can be met much more easily.

About Murali Raju

Murali Raju currently serves as Enterprise Architect with over 25 years of experience in the industry. Prior roles include ranging from executive positions at Segment with a successful acquisition to Twilio, multiple series-D companies, to leading strategy, business incubation, M&A as part of the Office of the CTO at Cisco Systems, Inc.

Murali's early career began as a software engineer, developing embedded systems, then majority as an EIR (Entrepreneur in Residence) for private equity with responsibilities ranging from portfolio strategy, engineering, product, and GTM of businesses within multiple technology waves.

About Island

Island, the Enterprise Browser is the ideal enterprise workplace, where work flows freely while remaining fundamentally secure. With the core needs of the enterprise naturally embedded in the browser itself, Island gives organizations complete control, visibility, and governance over the last mile, while delivering the same smooth Chromium-based browser experience users expect. Led by experienced leaders of the enterprise security and browser technology space and backed by leading venture funds -- Insight Partners, Sequoia Capital, Cyberstarts and Stripes -- Island is redefining the future of work for some of the largest, most respected enterprises in the world. Island is based in Dallas with research and development in Tel Aviv and can be reached at info@island.io or (866) 832 7114.

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