MICRO FOCUS®

Host Access Solutions for RPA

The time-saving, cost-cutting benefits of an automated enterprise are clear. What's not so obvious is how to automate processes that rely on critical but hard-to-reach mainframe data. That's where Micro Focus host access solutions and Micro Focus RPA can help.

Host Access Solutions for RPA at a Glance:

Drive automation across mainframe environments with Micro Focus host access solutions and Micro Focus RPA:

+ **Reach every host:** Automate all host applications— including IBM Z, IBM i, UNIX/Linux, and Unisys mainframes—across the enterprise.

+ **Automate your way:** Pick the automation option— traditional screen scraping or web services— that best leverages your organization's skills and resources.

+ **Gain easy access:** Transform host applications into web services and make them accessible as standard APIs for modern developer tools.

Access to Mainframe Data— Essential for Enterprise-Wide Automation

By automating repetitive manual tasks across the enterprise, companies can save time, cut costs, and free employees to focus on more important projects. Achieving such comprehensive automation requires the ability to extract data from a diverse range of applications and back-office systems—including your workhorse mainframes where vast amounts of enterprise data reside. But mainframe data is famously difficult to access. Connectors and specialized communications protocols are often required. Even then, it's a complex undertaking for most automation solutions.

Micro Focus host access solutions, along with Micro Focus RPA, provide the range of options you need to access mainframe data and realize your automation initiatives.

Unlocking Mainframe Data— Two Approaches

Micro Focus offers two approaches to accessing the hard-to-reach data stored in mainframe applications:

Traditional Screen-Scraping Automation— Micro Focus Desktop Terminal Emulators (Reflection, Extra!, and Rumba) with Micro Focus RPA

Micro Focus RPA accesses host data using a desktop terminal emulator. An RPA robot sends keystrokes using the preferred emulator and automation interfaces, then scrapes data from fields on the returned screen. Micro Focus desktop emulators offer a full range of automation interfaces—including IBM HLLAPI, the green-screen data access standard for 30+ years. For HLLAPI-savvy organizations, or those that employ developers who are adept in Java, C#, VB, or COM, screen scraping is a practical way to leverage mainframe data for RPA-based processes.

Web Services Automation— Micro Focus Verastream Host Integrator (VHI) with Micro Focus RPA

Micro Focus VHI transforms host applications into web services, which are then easily accessible as standard APIs by modern developer tools—and by Micro Focus RPA.

With VHI even the most complex host applications are easy to navigate, so developers don't need to deal with screen-handling logistics, transitions, and timeouts. VHI handles screen recognition, complex record sets, host inputs/outputs, and navigation—providing access as a web service API via REST and SOAP.

These APIs can be easily called by Micro Focus RPA and orchestrated as part of a workflow involving the host system and other operations. Developers model the screen workflow using the Verastream Designer. The model is deployed to the Verastream Server, which provides API access to the mainframe application. Micro Focus RPA then makes web service calls to VHI.

Together, VHI and Micro Focus RPA create an elegant solution that delivers:

Easy data access. Even complex host application screens can be modelled quickly with VHI and made accessible as a RESTful API. The intricacies of screen navigation, data entry, and error handling are all encapsulated within the VHI service—allowing the RPA engineer to access host data quickly and focus on the end-to-end automation workflow.

High-speed workflows. Given VHI's knowledge of the application workflow, it can operate at the host system's maximum speed—making it faster than traditional screen scraping.

Scalable automation. VHI-RPA services can be load balanced and scaled up during peak periods—maintaining responsiveness with increased robotic activity. Host sessions are pooled and mapped onto specific application workflows that can then be reused by RPA to make more effective use of host resources.

Secure data access. VHI complies with host security protocols, enabling RPA to access host data without compromising the IT organization's security and access controls.

Stable automation. Changes to host application screens sometimes require recoding across all affected RPA robots. But thanks to VHI's screen-recognition-handling capabilities, VHI-RPA applications are less susceptible to minor changes in the host application. VHI also centralizes screen navigation and processing of services—eliminating the need to code screen-handling procedures within robots, promoting reuse, and helping engineers work faster.

Two Real-World Use Cases
Let's see how each automation approach—traditional screen scraping and web services—can be applied in mainframe environments:

Improving Customer Service with Micro Focus Terminal Emulator and Micro Focus RPA
A large bank wants to reduce the burden on call center agents by implementing an interactive voice response (IVR) system to field customer inquiries. To that end, the bank starts using Micro Focus automation solutions to access customer data stored in multiple applications, including a mainframe application.

Now when a customer calls, end-to-end automation begins: The IVR system triggers a Micro Focus RPA workflow. The workflow calls a robot that accesses mainframe data via the Micro Focus Extra! terminal emulator. The IT operation steps in the workflow interface with API-enabled non-mainframe systems. Fast, efficient customer service is achieved.

Automating Mainframe Banking with VHI and Micro Focus RPA
Bank operators spend hours each day fulfilling multiple customer requests for money transfers. Each transfer requires operators to move between multiple screens in a mainframe application—verifying data, gathering transfer information, and confirming successful task completion. It's a cumbersome, potentially error-prone process. To save productive time, the bank implements Micro Focus automation solutions.

Now an application user models the workflow of the screens involved in transferring money between accounts. The model is deployed to the Verastream Server, which makes the mainframe transactions available as an API. An RPA engineer automates the money transfer workflow using Micro Focus RPA to make a repeatable account transfer process. All the bank operator has to do is initiate the RPA workflow and supply a list of accounts and transfer amounts. VHI provides fast, scalable, API-enabled access to the mainframe application.

About Micro Focus Host Access
Micro Focus provides web- and Windows-based technology to enable critical enterprise systems—IBM, UNIX, Linux, OpenVMS, Unisys, and HP—to participate in a broad range of automated scenarios.

About Micro Focus Verastream Host Integrator (VHI)
Micro Focus VHI is a powerful integration platform that puts mainframe assets to work in new ways—as mobile apps, web applications, and SOA web services for internal and cloud initiatives.

Contact us at:
www.microfocus.com

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About Micro Focus Robotic Process Automation (RPA)
Micro Focus RPA—built on a powerful automation and orchestration platform—gives you the power to build, secure, and scale automated processes, from legacy to modern, across the enterprise.

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