TRANSFORMING SAP PROCESS AND TEST AUTOMATION

led by Al-Powered UiPath Business Process Automation Platform and Infosys Cognitive Automation Studio
1. Introduction

As organizations adopt automation for workforce efficiency, enterprises need a structured approach to manage and achieve large-scale digital transformation. Robotic Process Automation (RPA) is mature in dealing with this objective through a structured workflow. However, there is a need to go beyond UI-based automation and access lower levels of the app stack (locators, APIs, data layer) to build strong bots. Smart Artificial Intelligence (AI) integration into these workflows can perform cognitive tasks, navigate uncertainty, and resolve inconsistencies.

Infosys has devised a smarter approach to help enterprises streamline their business processes, enhance productivity, and optimize costs via automation.

The innovative capabilities of UiPath offer an unparalleled solution for automating SAP tasks, enabling businesses to harness the full potential of their SAP systems.

The offering is an ‘all-in-one’ solution providing significant benefits to the customers as different frameworks, solutions, reusable components, utilities, best practices, and standards have been baselined with our experience handling multiple challenges and generating tangible business value.

With smart AI BOTs, reusable domains, technology-centric micro-BOTS and chatbot integration for self-service features, this solution is one of a kind in the market.

2. Infosys Value Differentiators

When we say, all-in-one approach, it supports an organization’s need for automation, scale the automation on the fly, and provide prebuilt, preconfigured, plug-and-play kind of components that support RPA, test automation, and bot test automation, with UiPath in one automation framework.

UiPath - Infosys SAP Testing Bots is repository of reusable domain-centric assets which provides a simple web-based interface and provides a facility to upload and download the components in one centralized place. Testing bots are available to jump start the automation of SAP Solutions with additional plug and play connectors.

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**UiPath - Infosys SAP Testing Bots Capabilities**

- **Robotic Process Automation**
  - Intelligent Automation Framework: Customized version of UiPath RE framework with self-healing capability

- **Test Automation**
  - Intelligent Automation Framework: Custom developed test automation framework with self-healing capability

- **RPA Bot Testing**
  - Intelligent Automation Framework: Custom developed bot testing automation to expedite bot testing

- **Reusable Templates**
  - Re-usable automation templates for RPA - Loader and Worker templates

- **Business Centric Test Automation**
  - Workflows driven test automation, AI and fuzzy selectors

- **Easy Configurations**
  - Generic as well as test case specific ‘One Touch Test Automation’

- **Auto Scaling**
  - Scale the automation by load distribution and parallel execution

- **Test Data Generation**
  - Pre-configured template to be used for test data generation for bot testing. Easy customization as per business process

- **Orchestrator Log Analysis**
  - Pre-configured template to analyze the orchestrator log and report the ‘Business Exceptions’ and ‘System Exception’ to expedite the bot testing analysis

- **Pre-Configured Reusable Templates**
  - Pre-configured, reusable, plug-configure and play templates

- **Test Execution Reporting**
  - Customized and Comprehensive test execution reports (drilled down from L1, L2 till L3)

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**AI Enabled Capabilities**

- **Fuzzy, Image or Anchor base Selectors**
  - Use of AI enabled selectors to identify objects

- **Check-Points**
  - Mechanism to for auto retry and self healing (AI Enabled) to recover and re-instate from failure

- Integration with ChatBots
  - Supports triggering of bot execution using ChatBot

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**Infosys Cognitive Domain BOTS**

- **1000+ reusable BOTS for UiPath**
- **Visibility into the detailed metrics at component and use case level**
- **Platform Independent Micro Bots**
- **Centralized governance/ common platform to monitor execution of all use cases**

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*Figure 1: Value Differentiators*
UiPath Integrated SAP Automation Differentiator

The UiPath certified integration with SAP Solution Manager enables customers to obtain maximum value from their investments in SAP software, by serving as a hub for all test management activities and as well as the central information resource for all automation and testing processes. The UiPath Platform also works in conjunction with a focused build for SAP Solution Manager. All available versions on the market can be seamlessly integrated and are fully supported.

Additionally, UiPath Test Suite integrates with more than 40 of the top Application lifecycle management (ALM) tools on the market in collaboration with Planview Tasktop Hub. With these capabilities, UiPath customers can apply production-grade test automation to both modern and legacy applications, maximizing the automation coverage of testing by automating what was previously difficult and complex.

3. Key Features

- A comprehensive library of prebuilt activities specifically designed for SAP automation (FTM, PTP, OTC, etc.). These activities simplify the process of automating complex SAP tasks and reduce the time and effort required to develop custom solutions.
- Seamless compatibility and smooth operations across various SAP modules and interfaces.
- AI capabilities such as machine learning and natural language processing, allow UiPath to automate complex SAP tasks intelligently, thereby enhancing the accuracy and efficiency of business processes.
- Seamless integration with other enterprise systems, third-party applications and CITRIX based applications, enables organizations to create end-to-end automation workflows that include SAP, as well as non-SAP systems.
- AI enabled capabilities for cognitive automation, smart analytics for better coverage and improved accuracy.
- Preconfigured, reusable, plug-configure and play templates. Scale the automation by load distribution and parallel execution.
- ‘All-in-One Approach’ differentiator which covers, RPA, test automation, and RPA bot testing capabilities.
- Pre-configured template to analyze the Orchestrator log and report the “business exceptions” and “system exception” to expedite the bot testing analysis.
- Pre-configured template to be used for test data generation for RPA testing enables easy customization as per business process.
- Supports triggering of bot execution using chatbot.
- Mechanism for auto-retry and self-healing (AI-enabled) to recover and reinstate from failure.

4. Benefits to Customers

Easier Implementation Effort:
Customers can save on total cost of ownership and reduce integration costs, by taking advantage of prebuilt and pretested Infosys SAP solution automation capabilities.

Accelerate Innovation:
AI integration in test automation helps reduce the challenges of traditional test automation and facilitates next generation automation.

Transformation:
Leveraging automation provides increased trust and confidence in their SAP in their investment decision.

Faster RoI:
UiPath intuitive interface, comprehensive documentation, and extensive community support enable quick implementations and deployments of SAP automation, resulting in a faster return on investment.

Synergy with all environments:
UiPath has extensive capabilities in automating complex SAP business modules, compatible with SAP GUI, different SAP solutions like SAP S/4HANA, SAP Ariba, etc. Supports both on-premises and cloud-based SAP systems.
5. How can the Infosys-Uipath partnership help your business?

Infosys has helped several organizations transform with UiPath and gain benefits such as improved productivity, reduced errors, and increased ROI. Infosys and UiPath are committed to generating superior-quality automation workflows for all technologies (desktop, web, VM, legacy, etc.) and automating manual testing with BOTs, ensuring the client’s automation needs are met with precision and efficiency. Thousands of ready-to-use prebuilt automations are available to achieve no-code development and provide a streamlined process for creating and deploying automation solutions. This helps with faster time-to-market, lower deployment costs, and greater scalability. Our services feature smart AI integration to bring self-service, analytics, and cognitive features that allow intelligent automation solutions that learn and adapt to their environment. This partnership enables the clients to benefit from our expertise and commitment to delivering efficient and effective automation solutions that meet their unique business needs. Enterprises choose to partner with Infosys, to deploy UiPath for several reasons:

- Infosys has been a UiPath Alliance Partner since 2018
- Strategic annual investments towards UiPath partnership and trainings
- Over 3000 UiPath trained resources
- Over 15 client engagements across various verticals
- End-to-end deployment from process discovery, process design, and implementation to platform upgrades and infrastructure support

Infosys partnership with UiPath has progressed to a greater extent in the test automation and RPA testing space. With the launch of the UiPath Test Suite, the platform was taken to leading manufacturing, high-tech, insurance, financial, and retail clients as a joint venture to bring in testing efficiencies and 100% automation for end-to-end workflows across heterogeneous application landscapes.

Success Stories

1. SAP test automation regression suite using UiPath Test Suite
For a leading US-based oncology-focused biotechnology company that strives to accelerate the discovery, development, and commercialization of new medicines for difficult-to-treat cancers, Infosys built a customized and scalable test automation framework using the UiPath Test Suite to achieve 100% accuracy and reduce overall regression cycle by 85%.

2. Test automation to validate SAP S/4HANA system
One of the fastest growing trading platforms, with operations in over 30 countries, was facing operations challenges such as manual testing and increasing maintenance requirements. Infosys proposed a solution to validate the SAP S/4HANA application using UiPath test automation. The result was a reduction of 85% in manual efforts and an increase in productivity of 90%. Eighty functional test cases were developed across different value streams in SAP (FTM, PTP, and OTC).

3. CPG major saves $15 million
A large CPG corporation faced issues with automation quality, scale, and cost, despite having an incumbent vendor and a RPA center of excellence (CoE). The client reached out to Infosys, as we were already supporting their IT operations through application maintenance, cloud, and infrastructure support. Infosys provisioned a team to support the RPA CoE, and deliver compound automation. To-date, they have deployed over 100 use cases in production, n this process, saving the client $15 million USD annually.

4. Global pharma automates SOX compliance at 99% higher efficiency
The client is the world’s largest producer of medicines and vaccines for pets and livestock. Infosys assisted them in deploying RPA to automate the Sarbanes-Oxley (SOX) compliance process in their SAP systems. The UiPath Platform automated high-accuracy business process for SOX compliance, reducing the need for human intervention and effort, cutting the timeline from four days to 30 minutes.

5. Infosys automates asset tracking using UiPath
The client, a global professional service company, partnered with Infosys to automate the process used to handle laptop requests. The APOS system logs around 400–1000 laptop requests daily such as assign, unassign, update, transfer warranty, etc. Requests are categorized into seven types with over 50 business rules and exception scenarios. Infosys designed an RPA solution using UiPath to automate all the asset tracking system (ATS) transactions without requiring any manual intervention. It’s increased efficiency and reduced effort by nearly five FTEs.

Infosys is a Platinum Partner and Global Reseller of UiPath license

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