

The time to benefit from automation in the cloud is now

A confluence of circumstances—notably a global pandemic, the resulting demands of a new business environment, and accelerating technology capabilities—has brought the topic of intelligent automation front and center. While there are different approaches to embedding automation in an organization, a key factor in any intelligent automation strategy is to rapidly migrate from on-premises solutions to the cloud. The benefit in doing so leads to better scalability, increased functionality and cost efficiencies for the intelligent automation program.

According to a November 2020 Deloitte survey of nearly 450 global business leaders, the majority of organizations (73 percent) have already started their intelligent automation journeys—an increase of 25 percent over the previous year¹—while more than two-thirds of them (68 percent) said their organizations have used automation specifically to respond to impacts of the COVID-19 pandemic. What's more, the number of survey respondents who said their organizations are deploying intelligent automation at scale had nearly doubled since 2019.

Meanwhile, the clear value of cloud infrastructure has given rise to everything-as-a-service (XaaS)—a trend also fueled by the sudden shift to remote business. Is it any surprise then, that in 2020 fully one-third of organizations accelerated their investment in cloud-hosted automation?²

Also unsurprising: automation supercharges digital transformation. At the top of this list is robotic process automation (RPA)—now powered by advanced artificial intelligence (Al) capabilities—a technology designed to automate a myriad of simple-to-complex-business processes governing any given application. And cloud can enable it all.



Why cloud-enabled intelligent automation?

At this stage, the benefits of migrating intelligent automation solutions to the cloud are clear. Momentum is growing: just one in 10 organizations Deloitte surveyed don't plan to use the cloud for automation solutions; nearly half use it for some automation; and 13 percent run automation solutions exclusively in the cloud.

While there are many benefits to adopting cloud-based intelligent automation, the headline is that there are three main reasons to do so: scalability, faster deployment, and cost reduction.



The barriers to scaling automation are significantly reduced when comparing a cloud enabled solution to the traditional on-prem model. The cloud infrastructure can easily be scaled up or down to keep pace with changing demand to ensure capacity is always optimized. This in turn enables the business to be able to add and remove automations from development in accordance with their specific needs. The high uptime environment allows organizations to make these changes with the peace of mind that they are not risking their operational stability.

TASTER DEPLOYMENT

The cloud helps streamline development and deployment processes enabling scale in 4-12 months as opposed to 6-24 months. Authorized users can now access the development environment from any device with the confidence they are using the latest suite of features, including innovative Al and ML capabilities. Once automations are developed and tested, the process of moving to production is just a few clicks away when using the cloud environment.

LOWER COST

The total cost of ownership decreases when leveraging the cloud as organizations focus less effort on maintaining the automation software and the underlying infrastructure. In fact, infrastructure, development and maintenance costs all decrease without having to sacrifice the quality and support of the environment. Additionally, by centralizing automation operations through a cloud offering, organizations can further streamline day-to-day operations.

Automation Anywhere understands these values of cloud-based automation. In October 2019, the company announced the next step in its evolutionary cycle of intelligent automation: its flagship enterprise RPA product, Automation Anywhere Enterprise, in the cloud (AUTOMATION 360). The company's on-premises Enterprise 11 platform reached end of sale on March 1, 2021 and transitioned to limited support on February 28, 2022. As a result, many of Automation Anywhere customers are now considering plans to migrate their RPA software to the cloud.



Key considerations for migration to the cloud

When exploring the use of cloud for intelligent automation and resulting plans for migration, consider these three key issues:

Security infrastructure

In addition to existing cloud security guardrails, organizations should have a dedicated secure client container—a secure client container (VPC) that hosts the capabilities required to automate a business process. The VPC will, for example, host digital workers and store process data.

Data protection

Any data associated with the intelligent automation software should be encrypted in the VPC to prevent contamination or compromise, and the VPC's security should be ensured through penetration testing. The data in transit should use a site-to-site virtual private network (VPN) with the organization's network, and the principle of least privilege should be applied to any provisioned access.

Migration strategy

A critical component of a successful cloud migration is developing a strategy aligned to the specific needs, requirements, and objectives of the organization. While cloud migration might seem like a simple upgrade, lack of a well-established plan can quickly lead to unforeseen complexities like incorrect migration timeline assumptions that impact timeto-value and ROI, increased levels of testing due to rework and overlooked opportunities to maximize the value of the cloud-based platform.

A trusted partner approach

Deloitte is not only an Automation Anywhere platinum partner, but also was involved in Enterprise AUTOMATION 360 design and testing pre launch. This experience has allowed Deloitte to design a methodology for migrating enterprise RPA to the cloud that mitigates unforeseen challenges and surprises. Deloitte has implemented hundreds of automations with this technology, and has the tools and capabilities needed to help organizations accelerate and optimize their migrations to intelligent automation in the cloud.

Our methodology consists of three components (Figure 1.):

- CURRENT ENVIRONMENT ASSESSMENT
- MIGRATION PLANNING AND PREPARATION
- MIGRATION EXECUTION

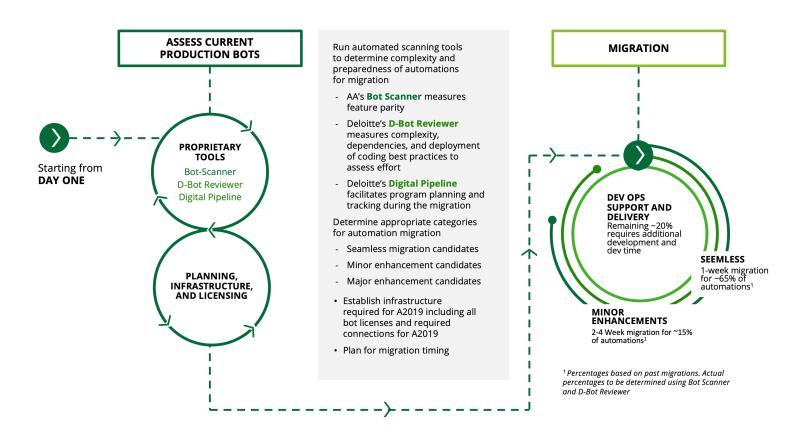


Figure 1. Deloitte's recommended methodology for facilitating IA cloud migration.

To understand the migration level of effort, and enable long term success, the assessment and planning phases leverage Deloitte's proprietary tools as well as Automation Anywhere's Bot Scanner. The D-Bot Reviewer supports operational stability by analyzing automations using algorithms designed by expert developers to ensure all code follows best practice design. This proprietary tool will review 35+ factors which are known to make code fragile such as: lack of single sign-on (SSO) integration, hard-coded file paths, incorrect error handling, poor variable management and inconsistent version management.

The insights from this tool enable organizations to avoid migrating unstable automations and determine where hardening is required. Deloitte also uses Automation Anywhere's Bot Scanner to assesses parity issues between Enterprise AUTOMATION 360 and current versions in order to determine what code updates are required.

Combining the output from these tools, Deloitte is able to effectively classify the migration risk of each automation into one of the following groups: Seamless: 1 week to migrate; Minor Enhancements: 2-4 weeks to migrate; Dev Ops Support and Delivery: 5+ weeks to rebuild and migrate. At that point, Deloitte can create a plan for migration timing and put in place the infrastructure required.



Deloitte will then update the automations based on the assessment of the current versions and cloud migration goals. During the execution phase, the bots are migrated to the Enterprise AUTOMATION 360 testing environment where their functionality is validated. Once completed, the automations are deployed into production, which follows the same governance requirements as the previous on-prem solution, where the operations are closely monitored to ensure all KPIs are met.

The entire migration process is tracked using another proprietary tool—Deloitte Digital Pipeline—a tracking, planning, and approval engine. Deloitte tailors its each migration to the requirements and objectives of the client—from planning the cloud environment, licensing, utilization, and future state to delivery of the cloud-based RPA software. If requested, the company can also provide license procurement, cloud environment standup and testing, and mentoring and training on the new platform. In so doing, they can help companies reduce the risks associated with migration, optimize their license utilization, budget effectively, and get a jump start on the anticipated business benefits of cloud-based intelligent automation. Indeed, this approach has enabled organizations to cut migration efforts in half and minimize business interruptions during the move to the cloud.

The future: preparing for automation-as-a-service

While Automation Anywhere's Enterprise AUTOMATION 360 offers the flexibility to be deployed on-premises, its introduction gives organizations the opportunity to transition to the cloud now. Those that do can accelerate their intelligent automation journeys, shortening the time to achieving the ability to automate business processes across the organization. Such a cloud infrastructure has been proven to keep pace with demand, to ensure capacity is optimized, and to minimize operating costs in the long term.

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SOURCES

Deloitte Insights, "Automation with Intelligence", December 2020

² ibid

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