SCALING RPA ACROSS THE ENTERPRISE WITH HYBRID CLOUD

Local has a leg over global. Enterprises are already aware of this. This is perhaps better understood in the natural preference to install applications on the mobile device over accessing them remotely. The difference between local and global is two-fold and both are equally important: One, the advantage of latency that local provides is irreplaceable; two, the data is safer in a local environment. When applied to deploying Robotic Process Automation (RPA), this analogy brings home an irrefutable truth—RPA in a hybrid cloud environment will give enterprises an edge they could not otherwise have. The combination of RPA and hybrid cloud reduces latency and improves security. Gaining insights into the idea of RPA in hybrid cloud is going to become critical in the shadow of COVID-19. This is because enterprises are increasing the RPA and hybrid cloud components in their strategy to respond to the COVID-19 crisis.

The shift to cloud was well underway before COVID-19. The pandemic has catalyzed the transition with cloud making it possible to reinvent how we work and bring continuity into business. Today, cloud adoption is being pursued to build business resilience against events such as COVID-19. It is becoming the invisible go-to backend to drive business. This is evident from the fact that cloud spending rose by 37 percent in the first quarter of 2020 over the same time last year.

RPA adoption is also growing at a significant pace. There has been an explosion in the intent to buy RPA in the wake of COVID-19. Between early January and around mid-April of 2020 the increase in average buyer intent for RPA has been 162 percent. RPA is assisting workers meet spikes in workload by taking over routine tasks, monitoring network traffic, managing customer cancellations and refunds, processing insurance claims, disbursing funds for financial relief, managing just in time delivery of components to pharma and manufacturing organizations, etc.

The challenge lies at the intersection of RPA and hybrid cloud. RPA was designed to be deployed on-premise where security is completely under the control of the enterprise. Chances of data being compromised by the injection of new technology like RPA are remote in an on-premise environment. Shifts currently underway indicate that RPA would have to be deployed in hybrid cloud environments to allow automation to scale to the enterprise level. Enterprises that demonstrate an understanding of this nuance and act on it will have an edge over competition.

The familiarity with, and understanding of, RPA needs to run deeper. We can categorize business systems into 3 categories: Upstream, mid-stream and down-stream. Upstream consists of OLTP systems that end users interact with directly. This is where transactions (orders, shipments, etc.) are entered. The mid-stream is populated by brokers and databases. These range from middleware to monitoring to RPA to databases systems. RPA can – and often does – play the role of middleware, but has the ability to transcend this role. Finally, there are down-stream systems that analyze business activities, like Business Intelligence and reporting (after-the-fact processes). RPA plays with applications at all three levels and must integrate effectively with all. In fact, at the mid-stream level it could also be used to automate interactions between legacy systems, which don't have APIs or user. Hybrid cloud becomes the perfect eco-system in which RPA can be deployed for all three streams.

RPA is, admittedly, hot. But it needs to evolve. Many organizations are led to believe it is the best thing since sliced bread. In reality, RPA architecture is in

its infancy, at about Version 0.1. It will evolve from the hub-and-spoke to peer-to-peer and ultimately to the mesh architecture, making it robust and ultra-dependable (like mesh architecture has done for mobile communication). RPA is going to take some time to reach this level of maturity. It needs to integrate with existing systems while continuing to evolve architecturally.

The good news is that not all systems and processes have to be automated to the same extent. At the moment, it is difficult to accurately predict how RPA architecture will evolve but it is important to understand that non-uniform RPA can deliver target results. Analogous to how NUMA (Non-Uniform Memory Architecture) provides uniform access to memory with different levels of access time, NURPA (Non-Uniform RPA) could provide unified automation to processes with varying levels of transparency.

Organizations will quickly feel the need to reconfigure (split/merge/fork) RPA as its implementation becomes widespread. There are several instances where RPA could result in errors, especially in environments where processes and business rules undergo rapid and dynamic change. In such instances, organizations will want to reverse the RPA, re-engineer the automation or start over again. Given, that all other systems that RPA needs to integrate with would already exist in

enterprise hybrid cloud, it would make sense for RPA to have better hybrid cloud integration.

Leveraging RPA with a cloud native flavor demands expertise and understanding of these nuances as well as the complexities of hybrid cloud. But the advantages of adopting RPA in a hybrid cloud environment are so significant that no enterprise can afford to wait. It must look for a technology implementation partner that has demonstrated ability in RPA and in hybrid cloud migration/management. The top advantages of deploying RPA in hybrid cloud are clear enough:

▲ Automation can be easily scaled across the enterprise, making it available where it is needed

▲ The cost of maintaining on premise infrastructure for RPA is eliminated

▲ Deploying RPA in hybrid cloud provides the required resilience and agility that enterprises are targeting

Enterprises that begin the journey to roll out RPA in their hybrid cloud environments are likely to face multiple challenges. RPA, to be effective, will require many applications to be stitched together and integrated; there will be a multiplicity of data sources to manage; there will be sensitive data and systems that must be ring fenced; access management will have to be defined; and auditing processes will have to be put in place. These are dimensions of technology that many enterprises are likely to face for the first time. They could easily cause major delays to achieving the goal of deploying RPA in hybrid cloud.

Using a qualified technology implementation partner with the required expertise makes it easier to bring RPA to a hybrid cloud platform. However, underlying this is one of the most powerful reasons for using hybrid cloud as the chosen environment for RPA: The strategy ensures the enterprise does not load on-premise infrastructure with processes that create a road block to retiring legacy systems in the future.

References:
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