

Automating Your IT Processes for Long-Term Success

Achieve consistent, repeatable, agile processes for IT.

Executive Summary

Challenge

We have become a very demanding society. In the digital age, where everything is *always on* and *always connected*, we expect things in an instant. The consumerization of IT means that everyone has an opinion; and they are not afraid to express it. Whether your customers are internal or external, they are quick to express dissatisfaction if they do not get the service they expect from their IT department.

However, what many organizations fail to understand is the IT complexity that sits underneath the critical services or applications that run their business. For IT operations, who have to run the business, this complexity is an everyday reality. Forbes estimates that as much as 80% of IT budget is spent on just keeping the lights on and managing the current state of IT operations.

Opportunity

Many of your crucial IT processes are documented as runbooks. These provide key process documentation for many tasks, ranging from incident and change management, to virtual machine lifecycle management, to making backups and handling disaster recovery. However, these runbooks are not always followed, leaving inconsistencies in the IT environment. These inconsistencies can lead to unexpected failures, which can sometimes be catastrophic. Compounding this, runbooks are typically not kept up to date as systems change, making it difficult to find the information you need to manage your data center. IT operations needs reliable runbooks that can run consistently and repeatedly, with the confidence that every step was performed as it should be. To achieve this, you need to automate your IT processes.

Benefits

So what are the key capabilities you need from an IT process automation (ITPA) solution? We have collated the top requirements from global enterprises over the past 15 years. They have all successfully automated the core data center processes supporting their core business applications and services. In doing so, they were able to reduce processing time by 70% and eliminate 90% of IT process errors while reducing manual effort by 90%. Now you can do this too. In this white paper, we will show you how.

Visibility and End-to-End Control of Enterprise Processes

Enterprise IT processes reside in a complex and heterogeneous IT landscape that spans multiple people and departments and, in most cases, multiple servers. How do you pull all this complexity into one well-orchestrated system?

Visibility is typically limited to individual technology teams, which means you do not have visibility or control across an entire process. This results in delays and errors that reveal themselves unexpectedly and, all too often, usually when it is too late.

You need a solution that provides complete visibility across the entire process. This allows both IT and the business to better manage and monitor the enterprise process from a single control point in order to ensure that desired outcomes are achieved as expected, on time and every time.

For example, service level agreements (SLAs) can be defined with real-time monitoring of enterprise processes and predictive capabilities that identify potential SLA violations before they occur. Also, it is not only necessary to have the ability to identify when service levels are at risk; it is critical to also act on this and to notify recipients and key stakeholders in a timely manner.

Intelligence, a Necessity to Deliver Operational Excellence

Runbooks serve as key sources of information for your mission-critical IT processes: nightly book closing, invoicing, order-to-cash processes and more. They document the steps needed to carry out these processes, schedule them efficiently, solve any problems that arise and escalate issues when necessary. By spelling out best practices, they help align IT with business requirements and give the company the agility it needs to comply with its SLAs.

Many runbooks are ineffective, however, because they do not take into account the fast pace of change for your business or for your market. Automation can help but all automation tools are not alike. Some just provide limited repeatable runbook automation by integrating incident, change, provisioning and operations management tools. That is certainly important; but it barely scratches the surface of what's needed for a true ITPA, automation that will deliver the highest value to your organization.

Ideally, an ITPA solution will not only integrate systems but will also reduce the amount of human interaction required to satisfy common requests. This ITPA solution will also take preventive actions on your behalf and resolve any problems that do occur, before the impact of those problems becomes unmanageable. This level of automation requires a platform that ties together a whole new level of intelligence through real-time advanced analysis of the processes currently underway. By intelligently managing your processes with the greatest financial impact, you can predict the times when it is not possible to meet all of them. You can then deprioritize the processes with the least-critical SLA in order to ensure that your business continues to move along smoothly.

IT process automation, together with the intelligent runbooks it incorporates, does all of the above. And, in so doing, it sets a new standard for IT automation, one that significantly lowers your operating costs.

On-Demand Service Requests

By taking advantage of an ITPA to automate common service requests from the business, such as adding a new user to a system, resetting passwords, provisioning a new server, or adding more storage capacity, you can dramatically reduce the number of IT trouble tickets that your department has to handle. You can build reusable components and easily integrate them into complex process flows, enabling your department to respond quickly to change. Instead of filing service requests, users of line-of-business applications can request services on demand, check their progress, and view the real-time status of SLAs through a role-based self-service portal.

Intelligently automating service desk ticket remediation can resolve up to 50% of incidents.

By automating the workflows that you previously had to perform manually, an ITPA will help you to build high-value tasks and process flows that run smoothly without human intervention. Through these capabilities, an ITPA frees up your valuable resources for more strategic projects. And by tightly binding your runbooks to your SLAs, an ITPA will not only improve IT agility and ensure consistent outcomes, it will also enable IT to speak the language of the business.

Closed-Loop Automation for Maximum Operational Health

In open-loop environments, the service desk is generally the central point of control. When an error occurs, service desk technicians identify resources and create service tickets. Then IT performs root cause analysis, often leading to the creation of more service tickets and the need to escalate the problem to a higher level. If you are lucky, the problem will get resolved before you miss an SLA and the business is adversely affected.

Intelligent runbooks can automatically respond to triggers and take whatever action is needed to resolve a problem. Automated workflows can also be rolled back. For example, if a runbook encounters an error during an application update, it can automatically roll back the environment to a previous state.

If trouble tickets are needed, IT process automation can generate them automatically, update them with the output of the automated workflow, and close them again, all in one clean transaction. In this way, automation not only reduces manual effort but also decreases mean time to recovery, from days to hours, or from hours to minutes. In addition, with an ITPA, you will find that you need far fewer trouble tickets than before. An ITPA, with its complex event processing engine, which includes both predictive analytics and pattern-matching tools can help you to identify historical issues and transform them into policies that proactively eliminate these issues in the future. These policies will enable the complex event processing engine to identify potential problems in real time and eliminate them before they affect performance. The result is increased quality of service, increased mean time between failures, decreased mean time to repair, and IT processes that are easily audited from a single, centralized location.

Fast to Deploy, Quick to Configure

By automating large-volume and highly repetitive tasks, an ITPA can increase IT performance and availability by reducing 90% or more of human error in IT processes and reducing IT administrative housekeeping efforts by 60% or more.

Multi-vendor and platform integration capabilities save you money by eliminating costly vendor lock-ins. A broad range of rule, process, and task templates will let you easily automate critical business applications across hybrid environments, including both your physical data center and the cloud, and they will also enable you to configure workflows without doing any coding or scripting. On top of all this, these qualities will enhance visibility and transparency by letting you manage everything through one pane of glass.

File Transfers Integrated into the Process

Whether it is moving data between remote locations, external business partners, or simply between internal systems, most enterprise IT processes will rely on secure and fast file transfers.

A separate, non-integrated and uncoordinated file transfer is an unmanaged file transfer approach, which introduces yet another disjointed *island of automation* and another weak link in the chain that makes up the enterprise process. Management of file transfers typically relies on manual coordination or time-based scheduling, which is not only inefficient but also introduces inaccurate and incomplete data into the process.

A centrally orchestrated automation solution that has integrated managed file transfer capabilities is required to enhance the flow and the quality of data across enterprise processes. Having a fully automated managed file transfer that is integrated into the platform provides consistent and reliable straight-through processing, making enterprises more predictable, with fewer errors.

Conclusion

Automating common IT tasks can ensure tasks such as incident and change management, virtual machine lifecycle management, backups, and disaster recovery are performed consistently and reliably, every time. This means no more unexpected failures and no more waiting around for servers to be provisioned, accounts to be created, and passwords to be reset. Staff are freed from mundane tasks so that they can work on projects that drive the business forward.

But to achieve this, you need the following critical capabilities in an IT process automation solution:

- Visibility and control of end-to-end processes, breaking down functional silos.
- Intelligence to manage complex processes in today's dynamic data centers.
- Self-service fulfillment of on-demand service requests.
- Integrated file transfers.
- Multi-vendor and platform integrations, along with a broad range of rules, processes, and task templates for fast deployment.

While there are many important factors to consider, if you ensure that your solution encompasses the above key capabilities as a foundation, then you can be certain that you will be able to meet the ever-increasing demands of the business.

For more information, please visit ca.com/automation.

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