I D C A N A L Y S T C O N N E C T I O N

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Run-Book Automation: Taking ITIL Processes to the Next Level

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An important solution to the increasing complexity of datacenters is the automation of repetitive scripted or manual tasks. So-called "run-book automation" (RBA) software can automate a variety of IT procedures at different levels, from orderly restarts of servers and databases, to moving suites of applications, to automatically provisioning a virtual server environment. The key trend is that IT organizations are expecting cross-silo automation workflows to deliver more efficient and error-free operations, which often can trigger a response to a pending problem. The technology can ensure that resources are allocated within strict business and IT policy guidelines. IT processes are codified as powerful, flexible services and can be tested, maintained, and documented from a single interface.

The following questions were posed by Enigmatec to Stephen Elliot, research director of IDC's Enterprise Systems Management Software and Industry Insights' IT Management Service (ITMS), on behalf of Enigmatec's enterprise customers.

Q. What is your view of run-book automation?

A. The run-book automation space is really about automating processes from what are often separate datacenter functions in order to improve overall IT service quality and efficiency. Run-book automation enables an IT organization to dissect existing tasks — tasks that involve not only technology workflows but also process workflows and handoffs across disparate teams. This enables IT staff to define a more automated, error-free process. The technology helps force the identification of key stakeholders for IT service delivery, improving communications and task delegation. The increased automation capabilities reduce the opportunity for human error, thereby improving availability, change tracking, and compliance verification.

Compliance is a critical market driver, but cost reduction is another key driver — having IT become more efficient with the same number of people. Another key driver is to reduce the possibility of human error, which can decrease downtime.

Over the next two years, we expect the level of interest in IT Infrastructure Library (ITIL) among Global 2000 companies to continue to rise and accelerate so that more than half of all midsize and large companies will adopt ITIL-based processes. Most midsize or large enterprise IT organizations should be interested in evaluating run-book automation technology as part of a broader process standardization or cost reduction project.

Q. What are the obstacles to implementing ITIL and aligning IT processes with business needs?

A. Currently, many organizations feel they already automate processes, when, in fact, those processes are merely being monitored or loosely connected using scripts. Key IT leaders and stakeholders need to buy into a more strategic view of IT — one that's more service oriented rather than component based. This requires incremental steps forward in automation; moving from a component standpoint to an IT service perspective and viewing service as a life cycle, an end-to-end workflow that requires continuous improvement.

This transition requires bringing together process models and technology workflows to drive consensus-based automated actions. SOA-based initiatives, virtualization strategies, and next-generation datacenters are based on IT's ability to become more dynamic and agile. RBA solutions can help move the needle forward for IT operations teams and enable a bridge across disparate teams.

Another key obstacle is getting the business managers, the process owners, and the application owners together with the IT operations team. Consensus building is becoming a valuable skill for IT organizations; overcoming change, configuration, and compliance management process definitions in relation to IT services is a difficult challenge.

Many companies need to change from a siloed culture to a team-oriented culture within the IT organization, and hopefully they have savvy business managers who can articulate what they really want, as well as know what they're willing to pay for.

Q. How can companies overcome these obstacles?

A. The change has to be viewed as a journey taken one step at a time. Encouraging a team-oriented culture is a critical piece of this. IT organizations have to focus not only on developing business objectives but also on measuring the success of the projects. Adopting a process methodology is a good way to overcome many of the obstacles. Technology can accelerate process adoption and teamwork through automation.

Q. How can companies get started implementing IT automation, and what are the disruptive technologies that would most benefit?

A. The IT infrastructure, SOA-based projects, and virtualization areas should be key focal points for automation opportunities. The first step is to take a hard look at mission-critical IT services, identifying inefficient processes, recognizing budget constraints, and determining compliance requirements.

As part of this process, companies need to identify the human element in relation to downtime and consider ways to reduce and mitigate risk. Formulating a change advisory board or adopting ITIL-based change, incident problem, and configuration management processes will move the organization forward.

Q. What criteria should be used to select IT process automation technologies?

A. As with any technology implementation, it is a good idea to look at vendor stability and service capability. From a product perspective, scalability and flexibility ought to drive the decision. The right solution will offer automation and control at a granular level to fit the organization's needs and will scale across domains to encompass storage, servers, desktops, and so forth. It should be easy to integrate into existing management tool suites and offer an easy-to-use interface.

Because the solution has to be adaptable to changing organizational needs, it's important to consider the ease with which one can create or change a process, delegate authority, or define security parameters. A more scalable and flexible architecture can meet changing needs over the longer term. Finally, a fast ROI is essential to delivering business and technology impact and alignment, ensuring further investment across multiple processes.

ABOUT THIS ANALYST

Stephen Elliot is a research director for IDC's Enterprise Systems Management Software Service and Industry Insights' IT Management Service. Mr. Elliot's primary focus is research, analysis, and strategy advisory on enterprise management markets and the impact of emerging and evolving technologies on IT organizations.

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