

# What is IT Process Automation

## ...and How Can You Make It Work for Your IT Organization?

**IT** organizations are under increasing pressure to ensure high service levels and infrastructure efficiency, while lowering operating costs and adhering to best practices. As such, efforts to integrate systems and automate processes have become two key goals for IT organization professionals. Achieving these objectives means improving the level of automation within both production and operations environments.

By increasing the levels of automation and eliminating common, repetitive tasks, companies can reduce operational costs, as well as reduce the amount of specialized staff needed to manage its systems. What's more, highly skilled IT professionals can be freed up to manage more strategic company projects and initiatives. Although the benefits of automation meets the business objectives of reducing costs, increasing productivity, and maximizing efficiency, the number one concern of IT managers today is integration. Automation itself can be a best practice in many organizations as they struggle to manage—and integrate across—increasingly complex infrastructures, but let's talk specifically about how automation enables best practices.

Implementing best practices is achieved primarily by defining and automating IT operations management processes. Although most data center tools (monitoring, provisioning, virtualization, service desk, etc.) provide deep task automation within their solutions, they do not automate processes between applications, departments, or data silos. This leaves a substantial amount of manual work for IT staff. Done right, IT Process Automation (ITPA), also commonly known in the industry as IT process automation, can greatly expedite service management if they provide the means to integrate and orchestrate IT processes.

So what is ITPA and how can it be applied to your IT practice? Before I define ITPA, let's talk about what it is not, including the common misconception that it is a job scheduler tool or function.

## Traditional Methods

Traditional automation methods, namely custom coding and scripts, are useful for running simple tasks, however, they typically lack best practices, change management, documentation, and the flexibility required in an operations environment, where business rules and configuration settings change frequently. For truly effective and agile process automation, ITPA software should not conceal custom code behind the workflow.

*“ITPA automation is attracting considerable attention as the need to design, build, orchestrate, administer, and report on workflows that support IT operations process has become a critical need that cannot be met by existing IT management approaches, such as traditional job scheduling products and custom scripting.”*

—David Williams, Gartner

Typically the way IT staff does business today is by altering the level of automation and integration required within IT operations. Traditional automation methods, namely job schedulers, run and monitor batch jobs. Although job scheduling comprises an important function in a production-computing environment, it is not well suited to automate operational processes or run book procedures, as they provide little to no integration with surrounding systems.

ITPA, a relatively new market category, provides the orchestration, integration, and automation of operational processes across multiple data, departmental, and application silos. This is done through IT-defined workflow that integrates the

people, process, and technologies involved in operational procedures.

Due to the recent recognition of this market by both IT organizations and leading industry analyst firms alike, some companies have attempted to accomplish the equivalent of what is now known as ITPA, by running lengthy scripts with a job scheduler. This technique is costly, unreliable, and error-prone.

While scripts and schedulers work well for small tasks, they can rarely scale to handle complex environments. They also lack sophisticated dependencies and reporting that allow users to keep audit trails of processes. As process requirements grow, and more functionality is added, the result is a complex mix of scripts, programs, and utilities that only a few people actually understand. More concerning is that home-grown scripts can quickly turn into a fulltime programming commitment as well as a time-consuming and costly management burden.

### **Beyond Job Scheduling— ITPA Provides Integration, Orchestration, and Workflow**

ITPA solutions include many of the features and capabilities users require in a job scheduler, while also providing more advanced functions. IT process automation software can automate any administrative, maintenance, or systems. The orchestration engine works in conjunction with integration capabilities to read results of these actions to determine next steps and to log/report on each step within the process. This is paramount for tracking change requests and maintenance procedures that interact with multiple systems and impact service availability.

business processes, such as restarting services, rotating logs, backing up data, deleting temporary files, and e-mailing files. It can also run several jobs on multiple machines, modify accounts, query databases, upload data and filter/read/send e-mail. In addition to standard enterprise requirements like load balancing, failover, failure routines, error handling, and logging, ITPA should also provide integration, orchestration, and process workflow.

### **Integration**

Integration is a key component to ITPA or IT process automation software, as it provides the ability to query, modify, collect, parse, and pass data between systems and products. Unlike 'connector' products which simply transfer data between systems, ITPA uses data to make decisions, to dynamically configure task parameters with relevant run-time data, and to update systems such as configuration management databases and service desk applications with process information. This gives IT organizations the ability to update one or all systems with detailed information on a process. It also ensures help desk staff, and level 1-2-3 support staff has access to problem status.

### **Orchestration**

ITPA also requires intelligent orchestration capabilities so it can initiate actions within third party. If a change request or maintenance procedure goes wrong, IT needs to determine the exact point of failure immediately.

### **Process Workflow**

Workflow not only provides visual insight as to the nature of a process, it also delivers conditional logic and dependencies support needs to automate complex processes.

Workflow also enables branching capabilities, useful for creating incident management routines that handle a range of errors and conditions. The main workflow can define the expected process, while branches are used for exception cases, error handling and escalation routines.

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To summarize, IT Process Automation helps to automate, integrate, and orchestrate operational processes across multiple data, departmental, and application silos. Automation can enable and enforce best practices in an IT organization. Automation helps organizations align IT services with business objectives by automating IT operations management through repeatable, reliable, and standardized best practices.

The ITIL framework outlines best practices for all IT activities. The service support areas of ITIL; incident, problem, configuration, change, and release management make up the daily operational tasks within IT. With many companies embracing ITIL best practices, it's a good place to start with automation since these are the most critical areas of IT operations today. And, how else can you ensure best practices and processes are truly followed, unless with automation?



**Todd DeLaughter**, president and CEO of Opalis, brings an incredible track record for managing and growing a business through solid technology and strategic partnerships, and he has a deep understanding of the IT Operations space. Prior to Opalis Todd was vice president and general manager of the \$1B OpenView Business Unit at HP where his responsibility for strategy and business planning, acquisitions, strategic partner relationships, operations, solutions marketing, and research and development helped generate growth at two times the market rate and doubled the size of the business during his tenure. He holds a Bachelor of Science degree in electrical engineering from the University of Houston.