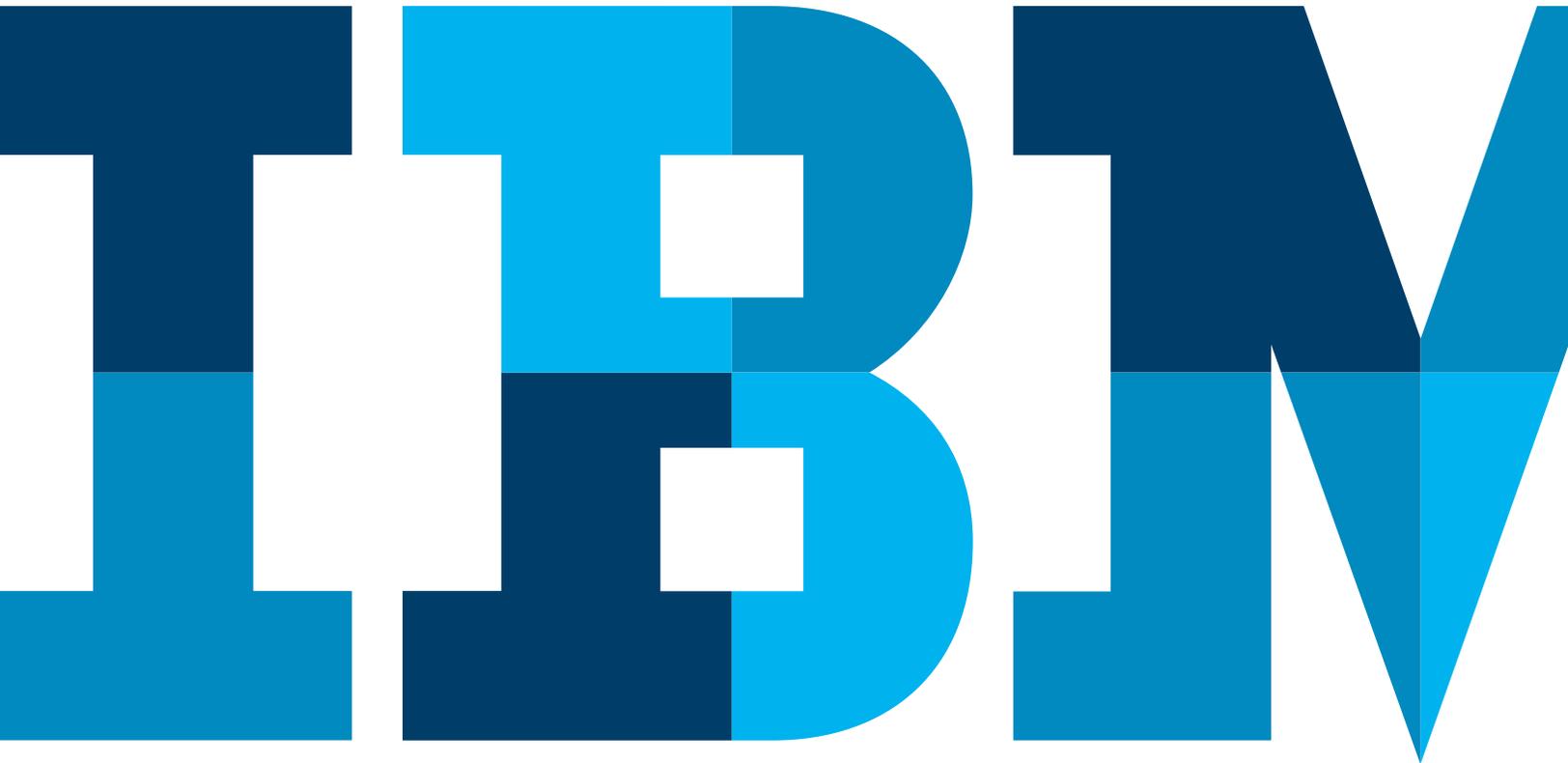


Streamline your workload management with an analytics-fueled hybrid solution



Cloud, analytics, social, mobile, cognitive: These disruptive technologies are the foundation of our new digital economy. Organizations struggle with managing workloads in emerging business models, whether these workloads are running on premises, in private or public clouds, or in hybrid IT combinations. Patching together quick-and-dirty scripts to integrate different tools is simply not effective anymore, if it ever was.

Batch schedules, administrative tasks, releases and deployments, transactions, business processes, daily operations and maintenance all require coordination. Overwhelmed? Relax.

State-of-the-art workload automation serves as a digital choreographer—it makes sure that your applications don't miss a beat, even as they run across disparate environments. And workload automation not only keeps everything moving in the right direction, it also saves you money by eliminating manual activities.

Jumpstart your digital transformation with workload automation

Cutting-edge automation is all about competitive agility. Without automation, it's difficult to control complex workloads, increase operational efficiency and get your solutions to the market quickly. Workload automation helps you turn the challenges of managing cloud and hybrid IT data centers to your advantage.

It empowers your users with flexible, consumable self-service automation to drive business value and reduce costs. In a controlled manner, you can promote changes across lifecycle stages (development, quality assurance, production) to expedite delivering applications and support continuous development cycles. In short, workload agility gives your solutions the edge they need to beat the competition.

IBM Workload Automation: Automated does not mean routine

IBM® Workload Automation provides robust, cross-platform batch and real-time event-driven workload management, available for distributed platforms, mainframes or as a subscription service hosted in the cloud. The solution helps you control your workloads by using intelligent, analytics-based automation to integrate across the hybrid IT spectrum and help optimize DevOps and self-service capabilities.

You can expect increased productivity with powerful plan- and event-driven scheduling, as well as the ability to run and monitor workloads from virtually any location. Both application developers and business users benefit from dedicated interfaces that offer flexibility, autonomy and control. Best of all, you can better manage critical service level agreements (SLAs), increase user satisfaction, and help your IT and business staff achieve their goals (see Figure 1).

I need workload automation because ...

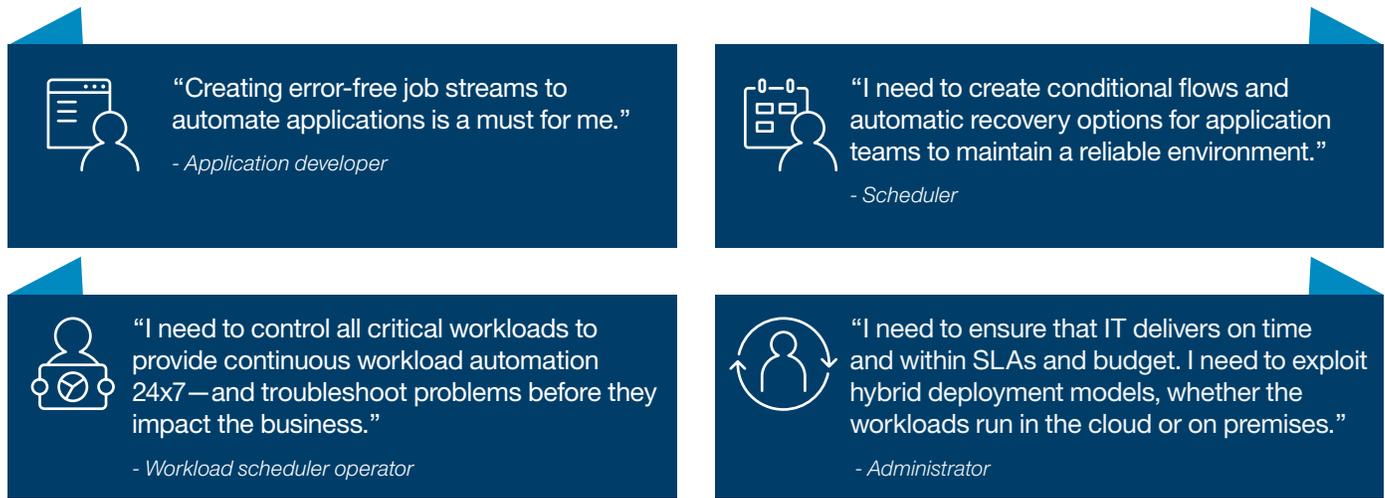


Figure 1: IBM Workload Automation helps achieve IT priorities across a variety of roles.

Train your workloads to perform more efficiently: Intelligent automation

Companies and consumers are creating and connecting more data than ever before. But it takes more than processing data in a timely, continuous manner to be competitive: applications now have the ability to extract insights and create intelligence from that data. By using and exploiting the latest data analytics technologies, IBM Workload Automation actually learns how to better optimize workflows and operations—and better manage SLAs. The result? Intelligent automation.

IBM Workload Automation embraces intelligent automation in innovative ways. For example, the solution can:

- Evaluate historical data with statistical algorithms to calculate trends, cycles and variance of jobs
- Predict critical job duration with more confidence, by using the IBM SPSS statistical analytics tools embedded with IBM Workload Automation
- Apply analytics to dynamic critical path management to optimize workload execution
- Incorporate a web-based “what if” Gantt chart view to graphically depict workload schedules and conditions as a timeline
- Provide impact analysis of planned and unplanned events (for example, long job duration, job deletion, new dependencies) via the interactive Gantt chart view
- Enable immediate action to adjust or correct the workload that is running, and safely promote changes, within the Gantt chart view (see Figure 2).

With IBM SPSS, the industry-leading analytics technology, fueling intelligent automation, your workloads become smarter. In short, you’re training your workloads to perform more efficiently.

Smart and simple

An intuitive web-based user interface provides:



Modeling by using graphical views



Optimizing with a “what-if” Gantt view



Monitoring with dashboards and drilldown views, including job output logs



Reporting with history and statistical analysis

Figure 2: IBM Workload Automation provides an intuitive web-based user interface.

Create reliable automation on the hybrid IT continuum

By 2020, over 90 percent of enterprises will use multiple cloud services and platforms.¹ Combined with traditional on-premises operations, this is known as hybrid IT. Hybrid IT is popular for cost savings, of course. But it also creates more flexible environments for the workloads, services and applications that drive your competitiveness and innovation. Ideally, these environments should connect and flow as one continuous delivery model. This raises a key consideration: how do you synchronize and automate IT investments across public clouds, private clouds and traditional on-premises IT environments? You’ll need savvy workload management that’s adaptable to hybrid IT.

IBM Workload Automation excels at managing workload automation across hybrid IT environments.

For example:

- The solution supports a broad range of platforms, such as UNIX, Linux, Windows, IBM z/OS®, and IBM iSeries. IBM's agent technology enables workloads running on premises or on the cloud to continue, even if the network connection with the master server is interrupted.
- Fully supported agentless scheduling and RESTful APIs enable remote workload execution and monitoring. Agents are available as Docker containers, and the agent can be added to existing application containers, to enable faster deployment and environment standardization.
- The orchestration point of control—the master—can be deployed on a distributed engine, mainframe or a combination of engines to accommodate organizational strategies and skills.
- Of special note, IBM Workload Automation is also available via Software-as-a-service (SaaS), as shown in Figure 3. Clients subscribe to the automation service for the quantity of workload they need to run, and the service is automatically provisioned. The service is continuously updated and highly available, so there is no need for clients to administer and upgrade servers.

IBM Workload Automation on Cloud

A SaaS solution for hybrid scheduling

Characteristics:

- Workload automation engine deployed and maintained by IBM Cloud
- Available in U.S., Europe, Asia and Australia
- Agents deployed on client's premises or cloud resources – where the workload runs
- Multi-tenant and high availability promotes continuous scheduling

Benefits:

- Your SaaS subscription is based on executed jobs pricing
- IBM takes care of infrastructure and maintenance
- Business users and developers receive on-demand service
- Pay based on job consumption
- IT organizations can shift IT resources from maintenance to new initiatives

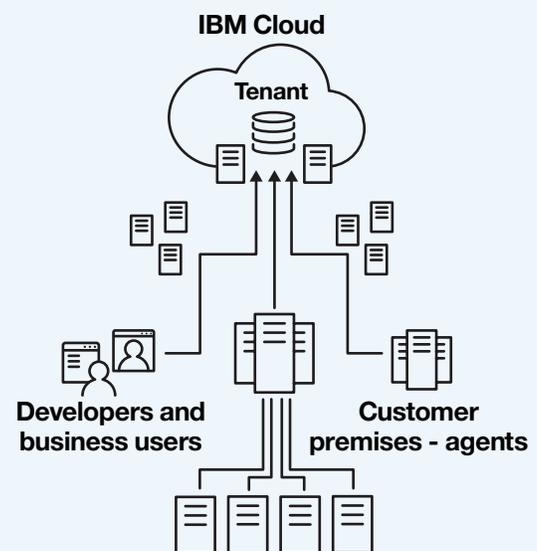


Figure 3: IBM Workload Automation provides a unique SaaS/hybrid scheduling offering.

With IBM Workload Automation, you control workloads via a single point of control and a unified view, and can automate end-to-end workloads that span hybrid environments and resources. Your scheduling definitions are stored in a security-rich database that you can access to add, modify and restore previous versions. You visualize and control workloads in different instances from one dashboard, expanding your reach to workload automation instances that are deployed on premises and in the cloud.

This is an ideal solution for multi-speed IT organizations that are constantly shifting between multiple priorities. It offers a self-service SaaS option to business applications that request more autonomy for their application automation, and keeps full control inside the organization with on-premises deployment.

IBM Workload Automation exposes data and services as RESTful APIs. This is fundamental in a digital era, and facilitates interaction, control and self-service automation across the hybrid IT spectrum. It gives developers new opportunities to integrate automation and operational control into their applications.

Enable business agility with DevOps capabilities

What do DevOps and workload automation have to do with each other? More than you think. Successful implementation of DevOps culture and toolchains are not limited to the way applications are built and deployed. Automation design and updates must be managed at the same speed to guarantee process reliability and business agility. The latest version of IBM Workload Automation facilitates the workload orchestration agility that's powered by DevOps principles. For example, the solution can provide:

- **Self-service automation for application developers:** Simplifies and standardizes workflow modeling by using self-service development with more than 30 business adaptors
- **Iterative and standardized development of automation:** Uses workload application templates that can be exported and imported into scheduling environments

- **Continuous delivery of automation:** Advances changes across lifecycle stages (development, QA, production) by using embedded promotion, keeping control of scheduling versions and providing rollback options if needed
- **Foundational capabilities for a trust collaboration between IT Ops and Developers:** More securely accelerates development and changes by adopting fine-grained access controls and centralized auditing

Ultimately, a DevOps initiative implies an agile development environment that easily works with automation to increase speed-to-market for your applications—without disrupting the quality of the service. Business users expect their application developers to get self-service access to automation capabilities to integrate efficiency and optimization into the services. IBM Workload Automation includes a modern, intuitive browser-based interface, which provides developers and administrators with graphical views and customizable dashboards. Designed with clients in mind, IBM Workload Automation provides an optimal modeling and monitoring experience to assist users in working faster and smarter.

IBM Workload Automation: Hybrid automation powered by analytics

To summarize, IBM has integrated several innovative approaches into a flexible, easy-to-use, streamlined workload automation solution (see Figure 4). This strategy includes:

- Applying groundbreaking analytics technology to your workload continuum to fuel intelligent automation, making your workflows smarter and more efficient
- Running reliable workload automation across hybrid IT environments and facilitating management through a single point of control
- Taking a “DevOps ready” approach by including embedded versioning and release management that enables speedy deployments while still keeping control

IBM Workload Automation Hybrid. Intelligent. DevOps-friendly.



Figure 4: IBM Workload Automation uses a strategy that embraces intelligent automation, hybrid IT and DevOps.

IBM Workload Automation offers cost savings with flexible pricing and hybrid deployment models. The solution is priced by environment size and volume of workload. These can be combined to help the client choose the best metric for defined workstations. Also, the product license includes all advanced capabilities (analytics, DevOps, business adaptors), which can provide transparent pricing and improved total cost of ownership.

Thousands of clients and 80 percent of Fortune 25 banks worldwide use IBM Workload and, EMA has once again named IBM a value leader, stating that improvements to the offering "continue a trend toward easier deployment, DevOps integration, and improved UI."³

Invest in workload automation: The IBM and HCL partnership

In September 2016, IBM and HCL Technologies, a global enterprise that reimagines business for the digital age, entered into a partnership for DevOps and workload automation products. IBM serves as the front end for contracts and support processes, with all offerings a part of the IBM Software strategy and catalog. HCL is responsible for development and support. This partnership embraces the innovative strengths of both organizations. And, it enhances IBM's already strong commitment to making powerful workload automation solutions accessible to clients all over the world.

Learn more

Register for the IBM Workload Automation trial at <https://ibm.co/2zGmmjY>.

Watch the video - [Stay in control of your workload](https://www.youtube.com/watch?v=EUH8SXjevKQ) at <https://www.youtube.com/watch?v=EUH8SXjevKQ>.

Visit the [IBM Workload Automation Marketplace](https://www.ibm.com/us-en/marketplace/workload-automation) page at <https://www.ibm.com/us-en/marketplace/workload-automation>.

Link to the [new Workload Automation community](http://www.workloadautomation-community.com) by HCL at <http://www.workloadautomation-community.com>.

Visit the [IBM Workload Automation YouTube Channel](https://www.youtube.com/user/workloadautomation2) at <https://www.youtube.com/user/workloadautomation2>.

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