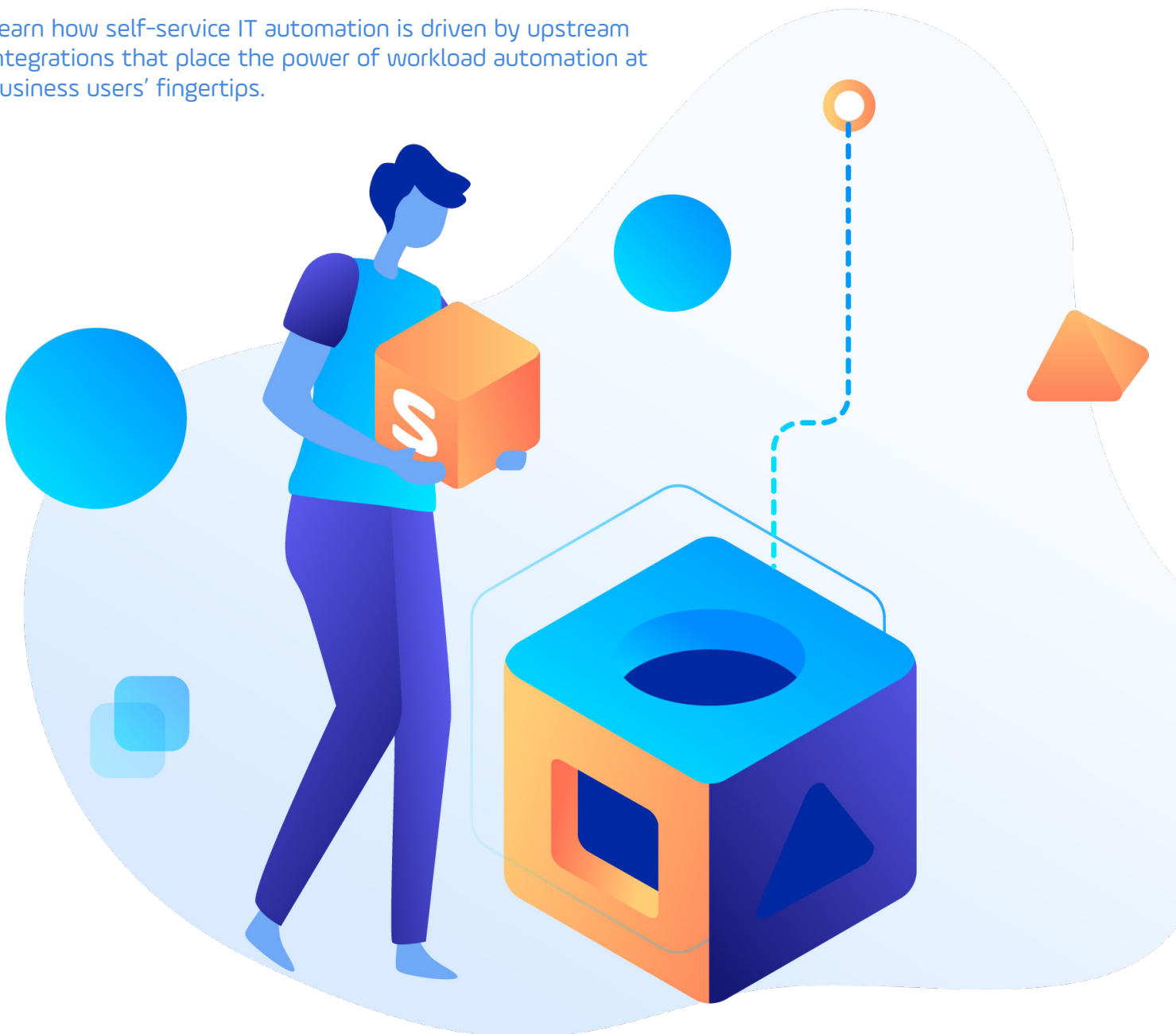




The Importance of Integrations in IT Automation

Learn how self-service IT automation is driven by upstream integrations that place the power of workload automation at business users' fingertips.





Workload automation has long been used by IT Ops teams to automate IT tasks and jobs. As enterprises have evolved, the need to **empower line of business end-users with self-service IT automation** has increased in order to maintain efficiency and keep data moving at the speed of business.

This shift has created citizen automators, or end-users who can kickoff sophisticated workflows within the solutions they use each day – without support from IT. The evolution from having a single IT Ops team running all automation to enabling citizen automators is largely driven by integrations between workload automation tools and third-party platforms and applications.

In this white paper, we will examine why integrations are so critical in empowering self-service IT automation with the help of IT automation platforms, plus:



The Basics of Integrations



Upstream vs. Downstream Integrations



Creating Citizen Automators



What to Look for in a Workload Automation Integration Platform



How Stonebranch Handles Integrations

What Are Integrations?

At a high level, an integration is a way of establishing a consistent, predictable communication channel between two software applications. In other words, an integration lets applications speak the same language. There are two main types of integrations:

- **SINGLE DIRECTIONAL** – An environment where data and applications span across private and public cloud networks. For example, housing a database in a private cloud that interfaces with an application layer residing in the public cloud.
- **BIDIRECTIONAL** – An environment that uses multiple cloud computing and storage services as part of a single network. For example, using a mix of cloud platforms like Amazon Web Services (AWS) and Microsoft Azure to store data and run applications.

Well-designed integrations can expand how disparate solutions work together and help IT teams better manage their environments.

Without integrations, IT Ops teams have to manually code communications between applications, costing significant time and money. The maintenance for this code would be extremely difficult, and time for new development would be almost non-existent. By using integrations, systems can communicate with each other with very little effort, because all the heavy lifting has already been done.

Particularly for organizations utilizing the DevOps methodology to streamline their IT operations, integrations can be a key piece of the IT automation equation; they allow for more powerful workflows that can automatically manage more tasks across the IT landscape.

There are multiple ways to set up integrations, but an IT automation platform is the only way to manage all integrations from one centralized place. This approach saves time, mitigates complexity and ensures stable connections between applications. Let's take a closer look at how an IT automation platform enables integrations.

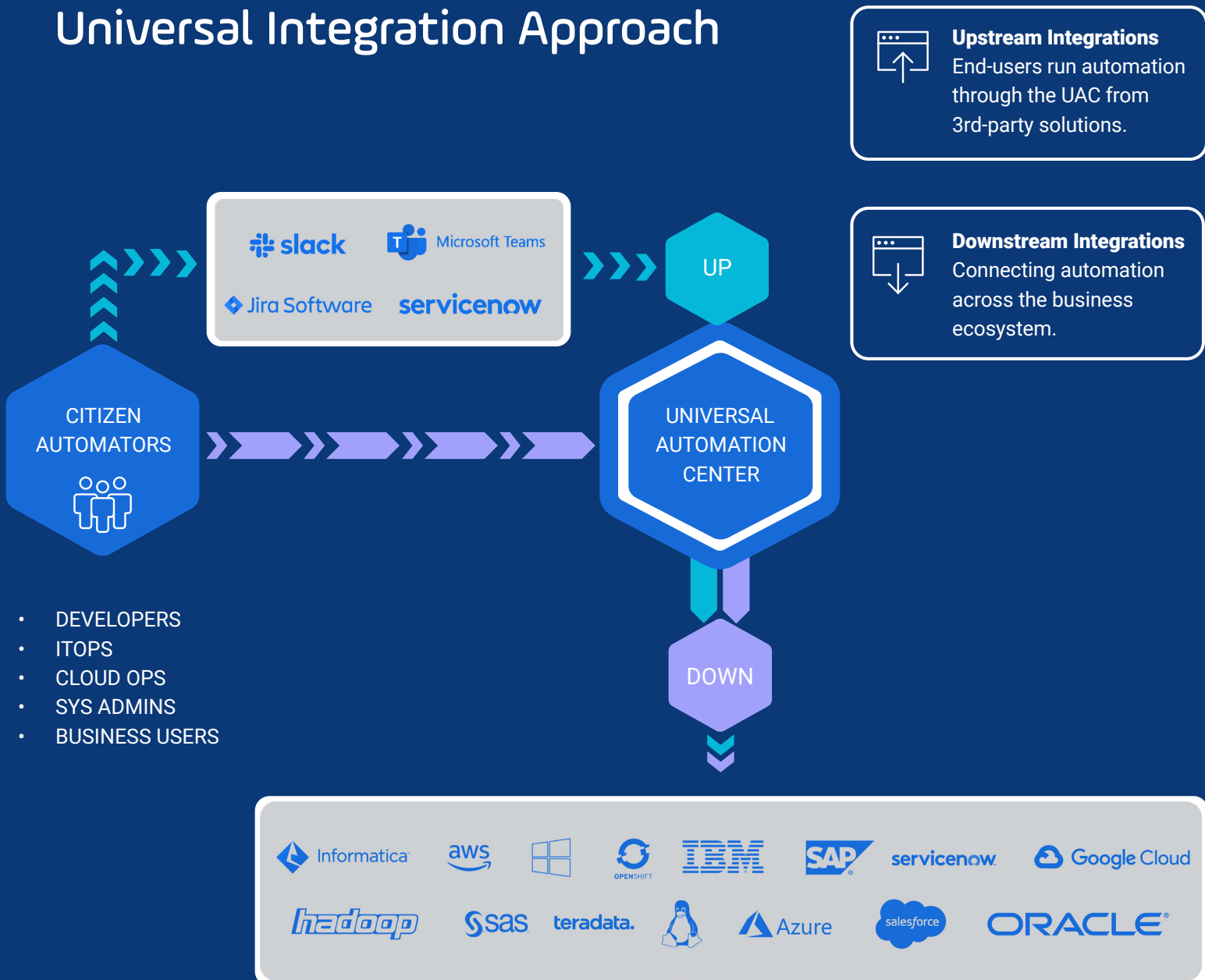
Upstream vs. Downstream Integrations

Upstream systems and downstream systems can be connected to one another using an IT automation platform with built-in integration capabilities. In this instance, the IT automation platform acts as an integration platform that connects to systems via remote APIs and local agents.

- AN **UPSTREAM SYSTEM** is a system that sends commands or data to the IT automation platform.
- A **DOWNSTREAM SYSTEM** is a system that receives commands or data from the IT automation platform.

Below is a diagram of the flow of commands and data between upstream and downstream systems, as they pass through an IT automation platform such as the Stonebranch Universal Automation Center.

Universal Integration Approach



How Upstream and Downstream Integrations Work



DOWNSTREAM

IT workflows are managed, accessed, and triggered from within the IT automation platform. Downstream is a traditional approach to IT automation.

Example: from within an IT automation platform, an administrator kicks off a workflow that automates specific tasks inside of a third-party solution.



UPSTREAM

IT workflows are accessed and triggered from within a third-party solution, meaning end-users can access automation from business tools they use every day.

Example: an end-user goes into ServiceNow to trigger (via an upstream integration) an automated workflow that provisions cloud infrastructure on AWS (via a downstream integration that passes through the IT automation platform).

The end-user never logs in to the IT Automation platform GUI, nor do they ever have to access AWS. However, they can access the functionality of the IT automation platform, which acts as the glue that connects ServiceNow and AWS together.

Of course, individual integrations between any two APIs are always possible without the help of an IT automation platform. However, this approach is simplistic and prone to collapse under its own weight.

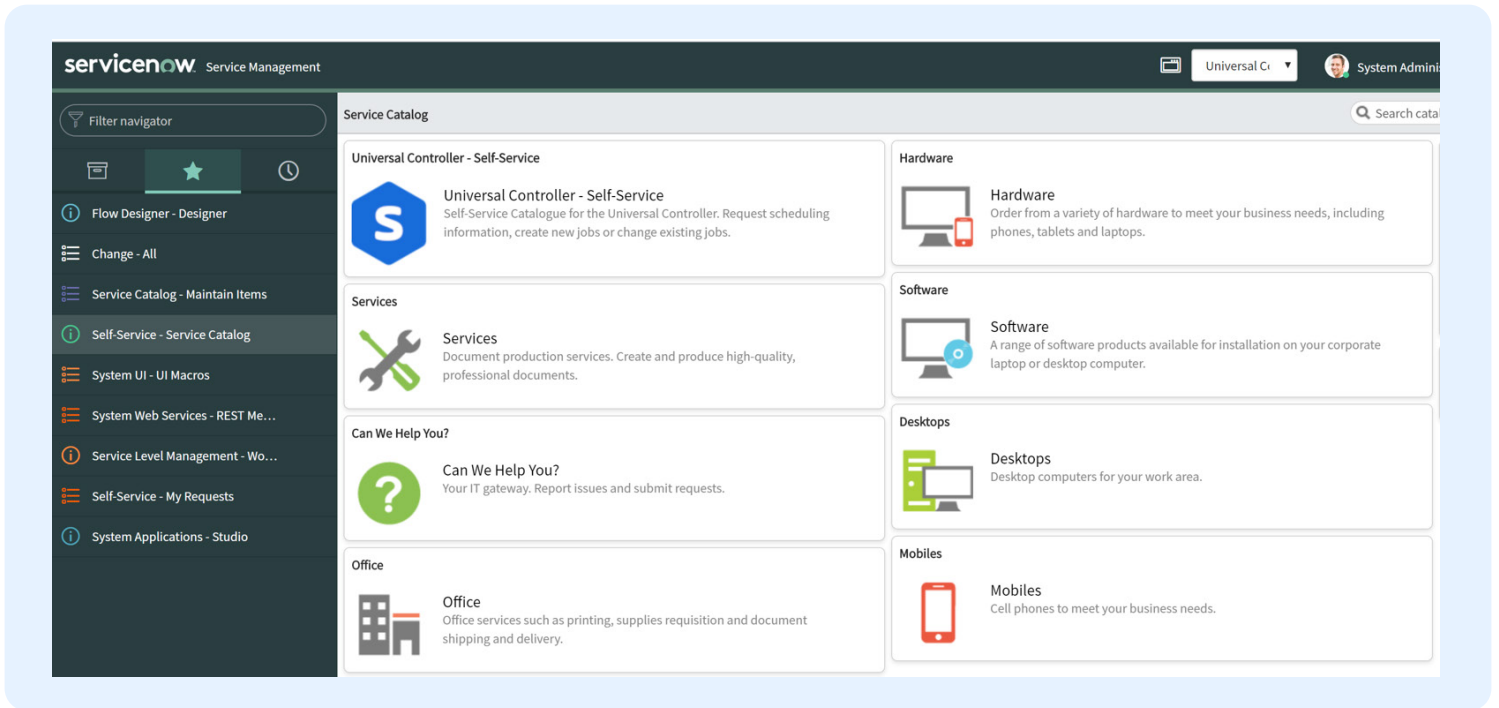
As enterprises transition to the cloud (creating more complex hybrid IT environments in the process) the best practice is to create a structured web of integrations with a central integration platform.

Equally important, a centralized approach in combination with upstream integrations enables the connectivity required to drive self-service automation.



Example Upstream Integration: ServiceNow

ServiceNow is a powerful IT service management solution. Once integrated with an IT automation platform, ServiceNow can trigger automation features and functions to perform pre-defined tasks.

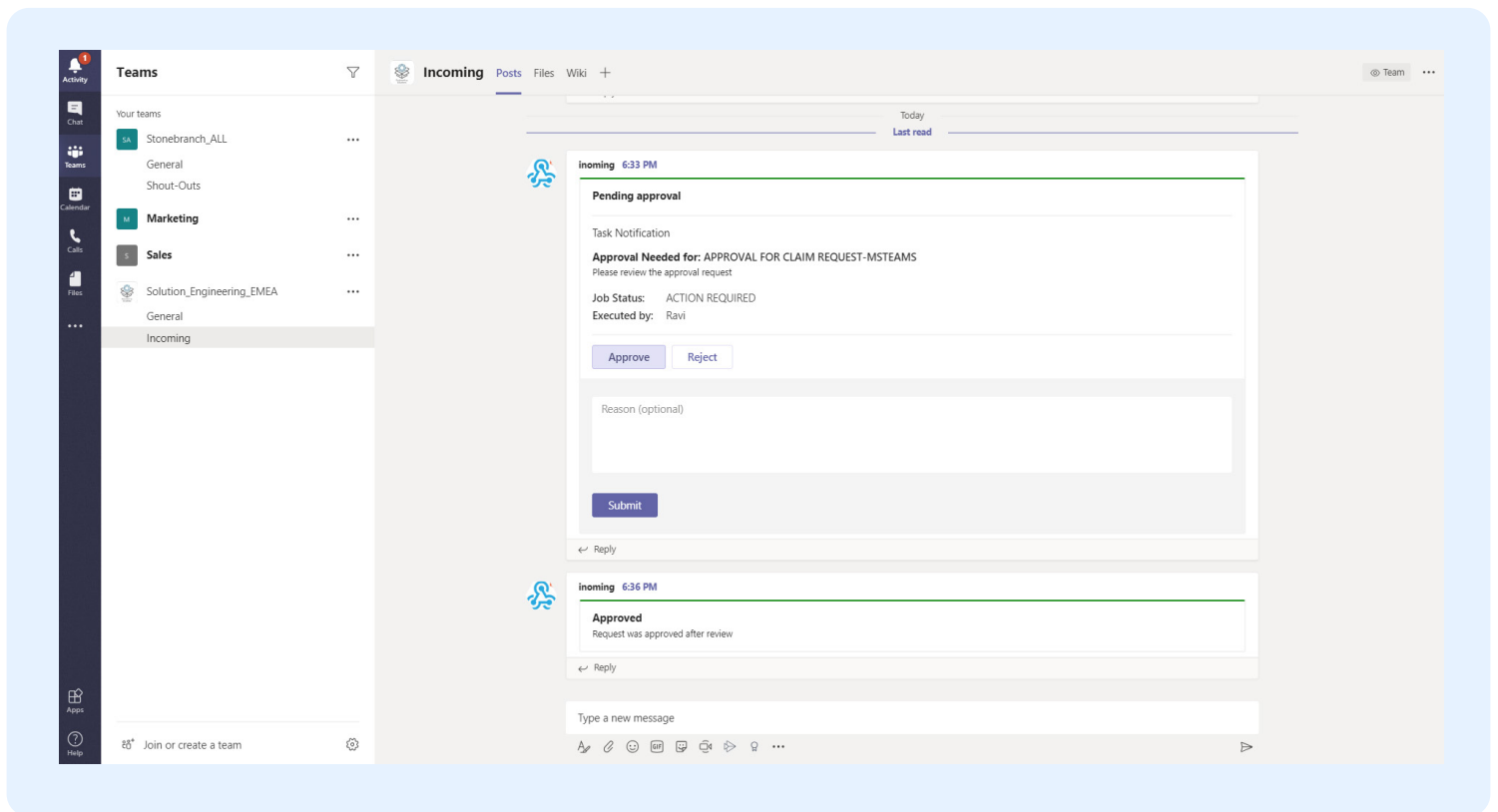


In the image above, you can see the ServiceNow GUI, in which the service catalogue has already been opened. Using the Stonebranch Universal Automation Center, ServiceNow users can carry out **self-service automation without ever having to leave the ServiceNow platform** – saving time for both the user and IT. All self-service actions can be combined with ServiceNow user permissions and approval processes.

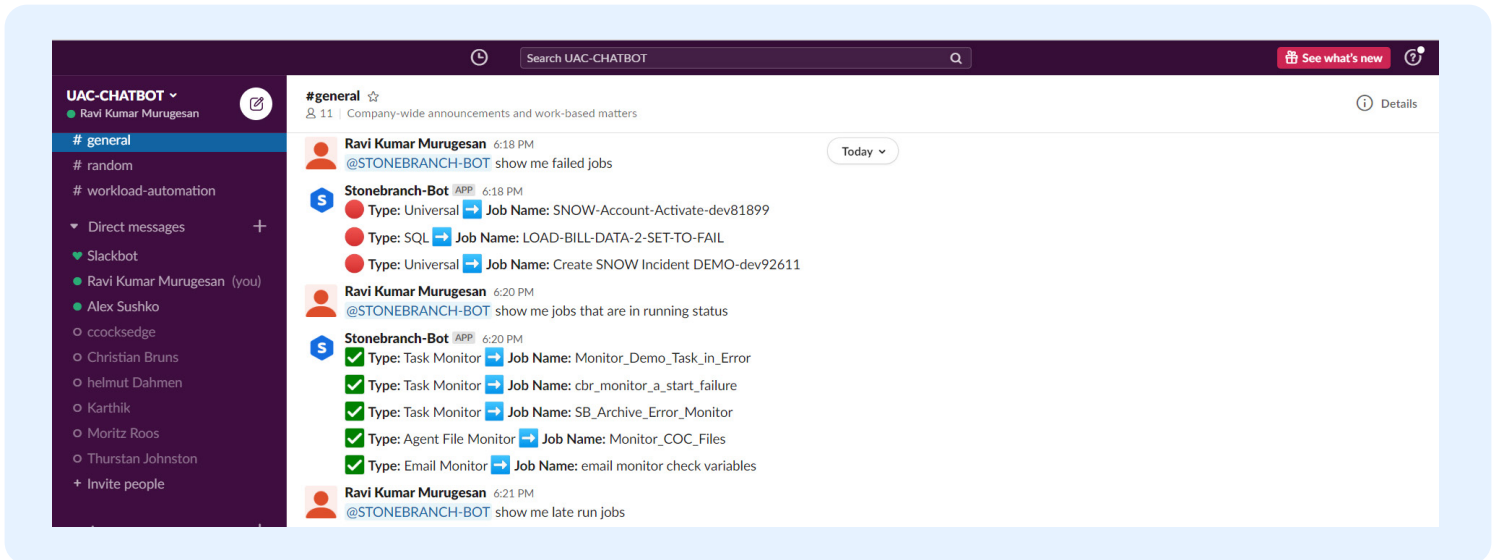
Example Upstream Integration: Microsoft Teams & Slack

Instant messenger (IM) applications like Microsoft Teams and Slack have become central to every business user's digital toolbox, enabling agility, communication, and productivity. This shift has led to demand for advanced upstream integrations that **enable execution and reporting of IT workflows and tasks** directly from IM platforms.

The Stonebranch Universal Automation Center offers line of business users the ability to trigger or request the status of a workflow in the IT automation platform directly from their Teams or Slack window using a simple set of commands.



* Screenshot example of an end user leveraging Microsoft Teams, integrated with Stonebranch Universal Automation Center, to run an automated approval process workflow.



* Screenshot example of an end user leveraging Slack, integrated with Stonebranch Universal Automation Center, to view available commands.

To give an example of this sort of integration in action, let's suppose a business user would like to know the status of a workflow that creates a weekly report for upper level management. That user would simply need to open Microsoft Teams or Slack and type in the command info for gathering this data. The integration would do the background work and deliver the task status directly to the business user's chat inbox.

Additionally, Teams or Slack can be used to create approval workflows that consist of a combination of end-user approvals and automated tasks that trigger once approvals are complete, creating **a centralized audit trail of every interaction**. In this case, end-users are not only able to complete these workflows within tools that they use every day, they are also able to track and get updates on workflows.

Creating Citizen Automators with Integrations

Upstream integrations can be transformative for enterprises. When applications and platforms are connected to an IT automation platform, they enable self-service automation, turning end-users into citizen automators.

Allowing citizen automators to trigger and review their own workflows helps reduce the workload of IT Ops, while speeding up the delivery of service.

Additionally, line of business end-users gain the power to perform advanced background IT processes and cloud automations from the comfort of their most familiar daily tools.



WHAT TO LOOK FOR IN A WORKLOAD AUTOMATION INTEGRATION PLATFORM

Many first-time buyers set off in search of a workload automation solution that integrates with their existing applications. While this is certainly important, and often nice to have out of the box, you'll want to find a future-proof platform that can adapt as applications release new versions or become obsolete over time.

The real goal is to find a solution that can integrate with any application, regardless of whether you own it today or not.

To accomplish this goal, you should focus on how easy or hard it is to set up new integrations with a given platform. You don't want to be limited by your workload automation vendor's standard or rigid integration list — some automation vendors even make it impossible to create new integrations on your own!

They might be willing to create a new integration for you, but the cost of this service is often not feasible at scale.

Evaluating the ease of creating new integrations ensures that you are future-proofing your automation program with scalable technology that can integrate with both today's applications and tomorrow's.



How Does Stonebranch Handle Integrations?

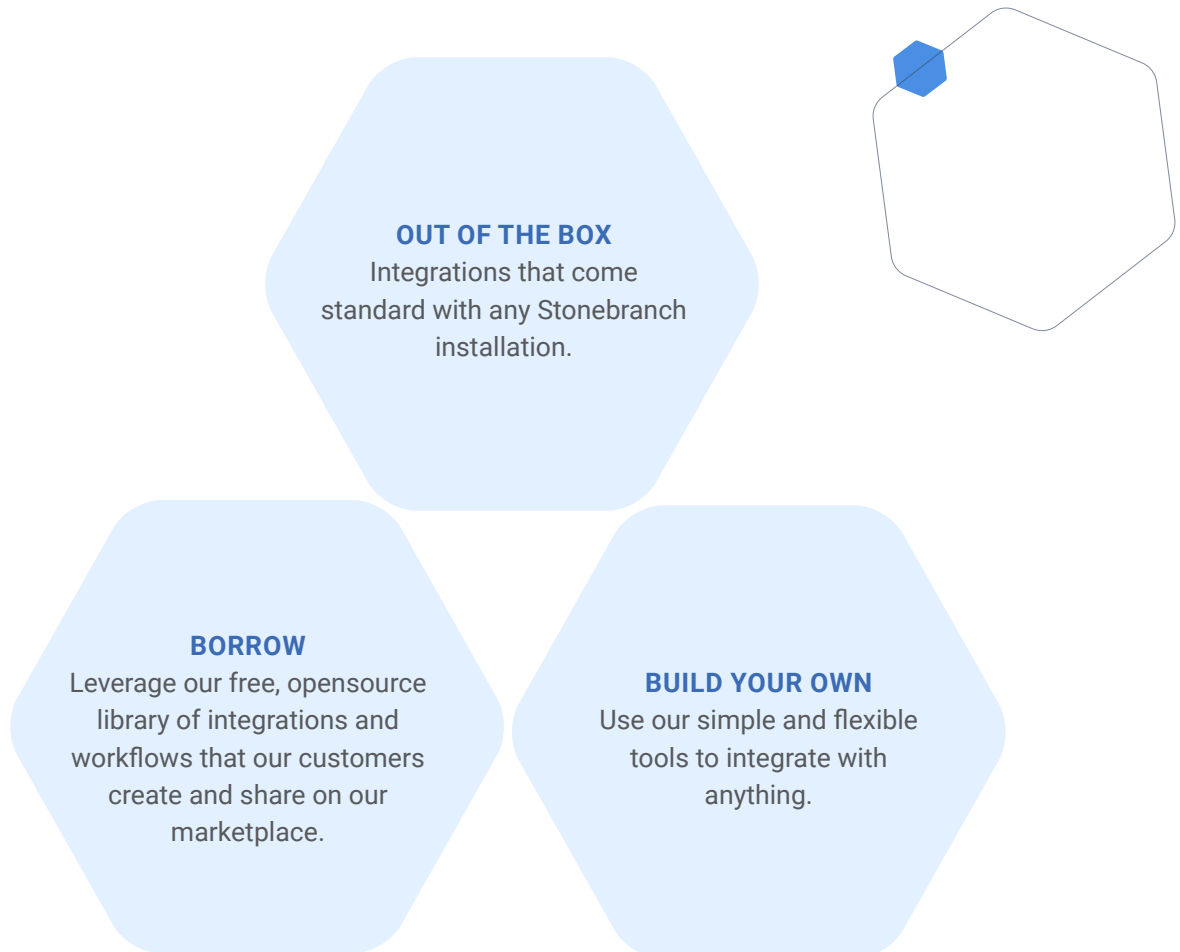
Stonebranch's Universal Controller comes with a Universal Integration Platform, composed of Universal Templates and Universal Tasks. These tools provide IT operations everything they need to set up integrations that serve their enterprise needs and manage them from one central location.

While Stonebranch does offer out-of-the box integrations, our solution is designed to empower teams to build any number of integrations with our tool set.

All you need to start building integrations is the WEB_Services or APIs provided by the application you

want to build an integration for, regardless of whether it is standard or homegrown. Using Python and other scripting languages, Stonebranch's Universal Controller can then be set to call up the application's API and functions and use them to execute tasks and services.

Stonebranch's flexibility also allows bidirectional integrations to utilize essentially all functions of the Universal Controller via the GUI. This hub and spoke model of managing integrations across environments from a central location allows for **much simpler management of all IT processes and workflows**, regardless of third-party application.



Integrations: The Key to IT Automation at the Speed of Business

Integrations are the fuel that power scalable IT automation. For IT operations teams, the ability to centrally manage integrations with an IT automation platform is the key to streamlining data connections in an ever-growing landscape of applications and platforms across hybrid IT environments.

With upstream integrations that connect many disparate systems, business users can **harness the power of self-service IT automation**, and IT Ops teams can save time without sacrificing the security or integrity of their complex IT environment. Well designed integrations can dramatically shift the culture of an organization, boosting productivity and empowering technical and non-technical users alike.

The Universal Automation Center from Stonebranch enables advanced automation across hybrid IT environments, providing the flexibility to adapt to your changing applications over time.





About Stonebranch

Stonebranch builds IT orchestration and automation solutions that transform business IT environments from simple IT task automation into sophisticated, real-time business service automation, helping organizations achieve the highest possible Return on Automation.

No matter the degree of automation, the Stonebranch platform is **simple, modern, and secure**. Using the Stonebranch Universal Automation Platform, enterprises can seamlessly orchestrate workloads and data across technology ecosystems and silos.

Headquartered in Atlanta, Georgia, with points of contact and support throughout the Americas, Europe, and Asia, Stonebranch serves some of the world's largest financial, manufacturing, healthcare, travel, transportation, energy, and technology institutions.

www.stonebranch.com



UAC works in hybrid IT environments across multiple platforms and business applications in real-time. Available on-premises or as a SaaS-based deployment, the UAC is a modern platform built to scale with your business.

To learn more about how an automation platform can drive your business forward, contact us today.

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