



EBOOK

The Automation Effect: Streamlining Salesforce DevSecOps in 2023

Leveraging New Technology to Boost Efficiency and Quality

INTRODUCTION

Salesforce development was designed to be user-friendly. "Clicks-not-code" is aimed at opening the world of development up to those without extensive coding knowledge. However, the ability to build applications and updates with cursory understanding of the development process doesn't guarantee it will reach its full potential.

The development pipeline has many areas that can be improved, and this is where DevSecOps comes in.

A focus on security along with streamlining development processes creates end-products that are more reliable, useful, and beneficial. These intentional processes accelerate release velocity and drastically increase the likelihood of a successful deployment.

And one of the most consequential tools that assists in this effort is automation. There are a variety of practices throughout the development pipeline that can be taken out of a team member's hands and optimized.

How does automation provide these benefits? What problems can it solve? And is it as reliable as the attention of a skilled team member?

We'll address these questions and more as we explore how automation impacts the success of a Salesforce DevSecOps strategy.

Here are the 6 ways automation streamlines the development pipeline:

- 1. Integration of New Developments
- 2. Deployment Assistance
- 3. Verifying Code Quality
- 4. Dependable Backups
- 5. Monitoring the System
- 6. Putting It All Together

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Integration of New Developments

Fantastic tool to implement CI/CD concept in Salesforce. The best part is end-to-end automated process for building, packaging, and test execution for Salesforce applications."

JASVINDER SINGH

Development teams often collaborate to produce a singular product. Multiple developers writing code to integrate into a shared repository can speed the process along—as multiple people can produce more work than a single person.

However, these shared responsibilities also run the risk of creating problems. Overwritten lines of code, contrasting functionality, and tedious integration tasks will sometimes create more issues than they solve.

Frequent updates from multiple sources can create small issues in the ultimate product. However, a failure to test these incremental changes has the potential to turn a small problem into a large one. And without consistent testing, a failed deployment can point to issues without pinpointing exactly where these issues exist.

Developers will then need to comb through the entire project to locate the issues and resolve them one by one. This not only takes them away from working toward more productive projects, it also costs the company money.

BENEFITS OF AUTOMATION

The best way to address these potential issues is to constantly monitor new integrations and streamline the process of moving lines of code from each individual source into the shared repository. These processes might be incredibly tedious for an individual, but perfectly suited for automation.

Continuous Integration is the development process where code is automatically integrated

from multiple developers into a singular software release. Each commit to the shared repository is verified by an automated build process to capture potential problems.

This allows the chance to see how everyone's code interacts for early feedback and bug-catching.

Deployment Assistance



Rapid deployments can be the difference between a timely release and finding yourself behind the competition. Customer feedback is essential to creating the most beneficial release possible, but slow deployment cycles disallow you from addressing these concerns in a meaningful way.

Deploying an update or software release is a complicated process of verifying proper arrangement of code, fixing and changing any potential issues, building and testing the updates, and more. This process takes time and attention away from team members pursuing other goals.

This is the culmination of every step of the development process. The success of the deployment is the ultimate goal. A failure to pay close attention to every aspect of the process—every time—leads to a failure of the project as a whole.

BENEFITS OF AUTOMATION

The processes of testing, compiling, and releasing development projects doesn't need to be convoluted. The aspects of the system that make it difficult for a team member to be consistent are exactly what makes automation the perfect solution. There are even two choices depending on your circumstances.

Continuous Delivery is the process to get all types of changes—features, configurations, bug fixes—into production at any time with the correct approvals. This enables DevSecOps teams to

build, test, and release new applications and updates with increased frequency and speed.

Continuous Deployment builds on Continuous
Delivery by removing the approval stage and
automating the whole release process. Every
change that passes all the automated tests is
automatically deployed into production. This
is a great option for companies that want the
fastest release cycles and are not bound by strict
regulatory requirements.

03

Verifying Code Quality

One of the best release management solutions out there in the market. Highly recommend it."

STELLA WAGNER

Every development project is only as good as the code that makes it up. A well-written and stable code repository will create a product that is more secure while fulfilling the needs of the eventual user.

And of course, the opposite of that is also true. Poor code creates security issues and poor functionality. Broken developments are a drain on resources as well as the time of your development team.

Coding errors have a tendency to snowball. What starts as a small problem will grow and impact other lines of code around it. Any error will require exponentially more work the later it's found in the development pipeline.

Developers can take time to verify the quality of their code as they integrate it into the shared repository, but this takes a lot of time and can lead to errors.

BENEFITS OF AUTOMATION

It can be difficult for a person to pay close attention to long lines of code for long periods of time. This is a simple result of the way we're built. Automation, however, won't tire as it scans line after line of code in your new updates.

Static Code Analysis verifies code throughout the entire development pipeline. Repeated checks

ensure that functionality is preserved as changes are made along the way. High quality code drives Salesforce development speed and security. This also lowers the risk of failing to adhere to regulatory standards while increasing release velocity.

I strongly recommend AutoRABIT for all things related to Salesforce – Salesforce Automation, Version Control integration, Data Migration, implementation of Continuous Delivery / Continuous Integration, Metadata Deployment, etc."

NIKHIL MUTYAM

Dependable Backups



Data disasters can happen at any time. The unfortunate truth is that there are almost an infinite number of scenarios that can lead to the loss or corruption of essential Salesforce data.

Cyberattacks get the most attention as a risk factor for your sensitive information. Companies spend a lot of time and money shoring up their external barriers to guard against bad actors coming in to steal or damage data.

However, a seemingly innocuous threat is always present—human error. Simple mistakes can have drastic effects on your Salesforce system. Accidental deletions are the leading cause of data loss. And poor employee habits are the most frequent cause of data breaches.

But no matter the cause—a data loss event can be catastrophic for a company. The loss of service results in lost revenue and a negative impact on consumer confidence. Certain industries can face regulatory action if sensitive data is not properly protected.

BENEFITS OF AUTOMATION

An essential tool to regaining operations after a data loss event is the ability to restore the system with a backup of data. But this backup is only as useful as it is current. Automated backups should be put in place to make sure you have a contemporary repository of system data to draw from and regain operational capacity.

A reliable backup and restore system is essential for complying with many governmental industry regulations. Automated backups can be set to take snapshots of your system data and store them in a secure location at customized intervals. And should a data disaster happen, you'll be able to quickly return to service without the need for redundant work from your team members to restore functionality.

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Monitoring the System

I have used this tool for the last year and I had a really nice experience...It is very useful on a day-to-day basis for a developer like me. It really makes my job very easy."

DHARMENDRA DOBARIYA

DevSecOps aims to address all aspects of the development pipeline. The union of development, security, and operations works best when there is direct access to applicable, real-time information.

An inability to address potential issues as they arise can lead to bigger problems down the road. And for security concerns, these issues could be catastrophic. It's essential to know the current state of your Salesforce system as well as how effectively your pipeline is operating.

System data informs the team about any potential vulnerabilities, opportunities for improvement, productivity bottlenecks, and unauthorized operations. So how does a DevSecOps team keep an eye on all these various aspects of the development pipeline?

BENEFITS OF AUTOMATION

Continued and repeated reports can be put in place to illuminate various aspects of a development pipeline, as well as the Salesforce system in general. These insights can be used for a variety of purposes—streamlining team member habits, alerting to unauthorized access of sensitive information, highlighting areas of success, and more.

These reports can be run manually, but that

takes a lot of time and attention. Scheduling and repeating these reports through automation ensures nothing goes unnoticed, and team members can be free to address more important matters.

Knowing who is accessing what information and from where, how long processes take to complete, and where data is being used can be extremely useful.

Putting It All Together



Maintaining proper levels of attention across a variety of considerations becomes difficult over time. It's human nature to turn our attention toward more urgent matters—we want to put out a fire instead of preventing one.

DevSecOps compiles the considerations of three separate teams into a singular concern. Properly executing Salesforce DevSecOps requires consistent attention. And when done correctly, it creates an atmosphere conducive to stronger developments, increased velocity, and successful deployments.

BENEFITS OF AUTOMATION

The increased visibility and accountability that results from instituting these automated processes heightens collaboration between team members. Increased productivity stems from the extensive benefits of instituting a DevSecOps approach to the Salesforce development pipeline.

Taken on their own, each consideration would require a dedicated individual and a sizeable amount of their time to properly execute the role. Automation frees up team members while increasing success rates due to reduced errors and increased reliability.

DevSecOps is a unified approach that takes the effort of a lot of teams. The end result is incredibly beneficial, but only if performed correctly and efficiently.



"AutoRABIT has helped us add a lot of automation to our software development lifecycle. I highly recommend it!"

FOREST COOK

CONCLUSION

DevSecOps is a specialized approach to the Salesforce development pipeline. Attention to detail throughout the entire process creates stronger products, efficient efforts, and—ultimately—satisfied end users.

The processes utilized throughout the development cycle aren't static. There are various approaches to accomplishing each task. And many these approaches can be optimized through the use of automation. There are many aspects to DevSecOps. The ability to address all of the potential challenges through the use of a singular platform makes the process much more simple.

The AutoRABIT platform provides tools such as Automated Release Management, Vault Data Backup & Recovery, CodeScan, and more to automate these essential processes and streamline your DevSecOps pipeline.

Salesforce development can be a powerful tool in introducing new applications and updates. Optimizing this process through automation increases velocity, security, and quality. Your end users might not notice the fact that automation was utilized in creating the product, but they'll take note of the quality and speed with which it was delivered.



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AutoRABIT is a Continuous Delivery suite for SaaS platforms. We automate and accelerate the entire application development and release process. This enables continuous integration and delivery by providing fast, simple, and secure end-to-end automation across all Salesforce implementations. We help enterprises achieve higher release velocity and faster time-to-market.

AutoRABIT provides automated Metadata Deployment, Version Controlling, Advanced Data Loading, Orgs and Sandbox management, Test Automation, Static Code Analysis, and Reporting. Our services complement and extend Salesforce DX. AutoRABIT Vault—our backup and recovery solution—streamlines Salesforce data, simplifies data backup challenges, offers disaster recovery and endpoint data protection on Cloud.

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