

FROM ONE WEEK TO ONE HOUR RapDev Enables CI/CD Automation and Monitoring for Northern Trust

RapDev's automation tools dramatically reduced this financial service firm's change approval timelines, increasing their ROI on ServiceNow investment.

As a DevOps leader, I want to automate all development activities as much as possible. Bringing all this into a popular system of records like ServiceNow is a big accomplishment. This kind of visibility gives us a lot of savings in terms of effort, and more than savings, that visibility gives us risk mitigation from the code quality and licensing perspective. RapDev made this a reality."

- VP/Principal Architect of DevOps, Northern Trust

THE COMPANY: NORTHERN TRUST

Northern Trust is a Fortune 500 financial services business with headquarters in Chicago. They work with corporations, institutional investors, and ultra-high-net-worth individuals.

They are one of the largest banking institutions in the U.S. as well as one of the oldest in continuous operation, with offices across 20 U.S. states as well as locations in 23 other countries across the world.

As of June 2021, they held \$1.5 trillion in assets under management and another \$15.7 trillion in custody.



THE CHALLENGE

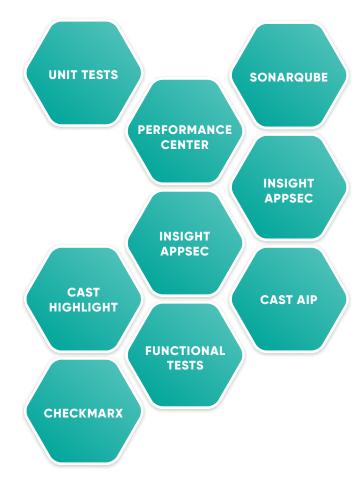
SPEEDING UP DEVOPS CHECKS AND BALANCES

As businesses and consumers have many choices about where to invest, save, and deploy their capital, it is vital for finservs to offer cutting-edge technology. This includes both internal applications and client- or customer-facing applications, plus websites and many other technological components.

To stay competitive, modern developers — even those in highly-regulated industries — must offer high-quality software and release it quickly. Accomplishing this at enterprise scale requires a high level of confidence in the quality and security of those applications.

To achieve this goal, organizations must embrace modern practices like Dev(Sec)Ops and continuous integration and deployment (CI/CD). These approaches apply tools and processes that value and facilitate speed. Companies who want to develop software in a cutting-edge manner must embrace automation across the software development and delivery processes.

For the engineering teams responsible for CI/CD pipelines at Northern Trust, checking the software code for vulnerabilities and licensing compliance had become a bottleneck in the release process.



PART OF THE SET OF TOOLS AND APPROACHES USED BY THE TEAM.

WITH THOUSANDS OF CHANGES A WEEK, THERE WAS ONLY SO MUCH THE ENGINEERS COULD DO MANUALLY

These processes helped them conduct pre-release gate checks for software and the microservices underpinning them. Unfortunately, this still required manual evaluation of the results to determine whether to make and/or approve a change.

In fact, for a single change, employees often had to contact four to five different teams to gather testing results. Only then could they decide whether to approve a new release or other change.

These manual gate-checks also made the approval process subjective. Furthermore, given the highly

regulated nature of the financial services industry, it was important to ensure each change approval was compliant and left an auditable paper trail. With thousands of changes a week, there was only so much the engineers could do manually.

To streamline the release process, Northern Trust sought a way to automate this. Initially, they opted to use the ServiceNow DevOps module. However, the module did not support Github Actions out of the box, which was a key requirement. They needed to uplevel their implementation, and they recognized that external expertise would speed up the process & deliver the best possible results.

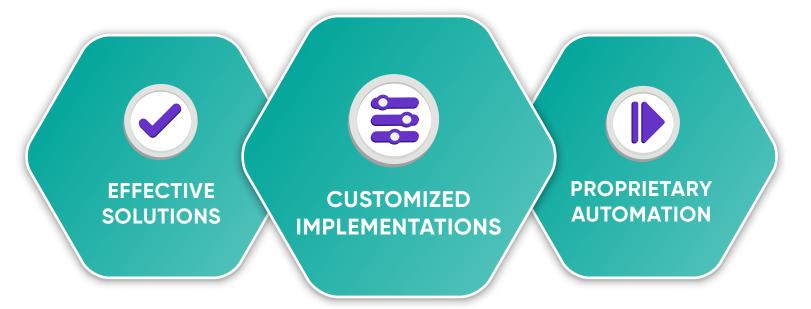


THE SOLUTION

AUTOMATED SERVICENOW IMPLEMENTATION WITH RAPDEV

When Northern Trust asked ServiceNow to recommend an implementation partner, RapDev was their obvious choice. After meeting with the RapDev team, Northern Trust signed on to quickly roll out ServiceNow for their CI/CD pipelines.

WHY RAPDEV?



RapDev recommended that Northern Trust use the ServiceNow Governance, Risk, and Compliance (GRC) application to comply with financial services and other key industry regulations.

As a ServiceNow Elite Partner, RapDev's team is an expert at engineering effective solutions that automate key steps across the software development life cycle (SDLC), while ensuring an audit trail for compliance. RapDev's team of engineers helps organizations gain visibility into their cloud-native services and infrastructure by implementing ServiceNow.

The company's expertise in DevOps and modern development practices means it's able to create customized implementations for each customer.

For Northern Trust, RapDev's engineers recommended utilizing the ServiceNow DevOps application to accelerate change management.

Proprietary automation tools are central to RapDev's ServiceNow implementations.

Instead of forcing Northern Trust to perform manual testing on their microservices, RapDev automated the discovery of microservices and artifacts and their storage in ServiceNow.

This created a central system of record for artifact names, versions, and other metadata associated with an application.



THE RESULTS

INCREASED SPEED AND ACCURACY, TIME SAVED

ONBOARD MULTIPLE TEAMS, 186 PIPELINES, AND 99 REPOSITORIES.

REDUCE THE TIME REQUIRED FOR CHANGE APPROVALS FROM ONE WEEK TO ONE HOUR.

REGAIN THREE HOURS OF (HIGHLY VALUABLE)
DEVELOPER TIME PER DEVELOPER.

ACHIEVE 97% ACCURACY FOR A CONFIGURATION MANAGEMENT DATABASE THROUGH THE REGISTRATION OF ALL MICROSERVICES VIA NOW.YAML, DECREASING OVERALL RISK.

With this information in one place, the Northern Trust team now has complete visibility into the software delivery lifecycle. They can release updates and new features with confidence, knowing they're mitigating risks and vulnerabilities and maintaining an audit trail.

IMPLEMENT A CHANGE APPROVAL POLICY THAT DROVE AUTOMATED APPROVAL, MANUAL APPROVAL, OR AUTOMATED REJECTION DECISIONS.

QUICKLY DEPLOY DEVOPS IMPLEMENTATIONS USING A TAGGING STRATEGY TO TRACK MICROSERVICES BY TREATING THEM AS SDLC COMPONENTS.

AUTOMATICALLY DETECT NEW ARTIFACTS AND PUSH THEM INTO SERVICENOW WITH THEIR ARTIFACT NAME, VERSION NAME, AND TESTING RESULTS.

RapDev's deployment also enabled Northern Trust to increase the ROI of their investment in ServiceNow. Through their work with RapDev, Northern Trust was able to identify additional use cases for ServiceNow within their organization, further increasing the platform's ROI.

My experience with RapDev was awesome," said Basivi R. Junna, the VP/principal architect of DevOps at Northern Trust. "The implementation, the solution, the scheduling, executing according to timelines — and most importantly, designing solutions for our requirements that are maintainable and sustainable."



OVERALL, THE RAPDEV IMPLEMENTATION WITH NORTHERN TRUST HAS BEEN A HUGE SUCCESS ON MULTIPLE FRONTS AND HAS GIVEN THE TEAM INCREASED CONFIDENCE IN THE QUALITY AND SPEED OF THEIR SOFTWARE DELIVERY PROCESSES WITHOUT INCREASING RISK TO THE COMPANY.



NEXT STEPS

SERVICENOW EXPANSION OPPORTUNITIES

With ServiceNow's value proven, Northern Trust is now looking to implement it across their entire organization. This will help them bring the time and cost savings, risk reduction, and process improvements they have already implemented to the whole company. Staying competitive in financial services requires this sort of forward-thinking investment, and Northern Trust is a perfect example of how to do it right.

NORTHERN TRUST: COMPANY FACTS	CHALLENGES
One of USA's largest finserve institutions	Change approvals required manual intervention from 4-5 teams. resulting in a one-week delay for each sprint
25,000 employees	
\$6.59 billion in revenue (2021)	Gaps in compliance and auditing processes
\$1.5 trillion in assets under management	Slow-downs & inefficiencies across the SDLC
\$15.7 trillion in assets under custody	RAPDEV SOLUTIONS
SERVICENOW PRODUCTS DEPLOYED	ServiceNow DevOps deployment for microservices
ServiceNow DevOps	microservices
	Implementation of Github support for SDLC

OUTCOME

CHANGE REQUESTS THAT TOOK ONE WEEK NOW HAPPEN IN ONE HOUR



INCREASED ROI FOR SERVICENOW DEVOPS & GRC IMPLEMENTATIONS



REGAINED THREE HOURS OF DEVELOPER TIME PER DEVELOPER



30+ COMPLIANCE CHECKS IMPLEMENTED WITHOUT SLOWING SDLC



ABOUTABOUT RAPDEV • ABOUT NORTHERN TRUST



As a ServiceNow Elite Partner and Gold Datadog Partner, RapDev is committed to guiding customers through their Datadog and ServiceNow implementations.

From building CI/CD pipelines, to helping organizations increase velocity in their release cycles, the RapDev team has a wealth of knowledge around developing agile and customer-centric solutions to unique tech problems.







Through our expertise and dedication, we transform the plans of the world's most successful individuals, families and institutions into action so that we can help our clients reach their most ambitious goals.

Spanning decades and generations, our longevity comes from the recognition that we are more than a financial institution. We are active participants in our communities, global leaders in business and philanthropy and thoughtful architects of innovative employee benefit and support programs.

Our footprint extends across offices in 22 U.S. states, Washington, D.C., and 22 international locations.

