

The Real Deal on ServiceNow Automated Testing Framework

'ike (knowledge) level: Novice

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If you're using ServiceNow, you've probably heard of the **Automated Testing Framework (ATF)**. It's a neat tool that automates functional testing for your ServiceNow applications, saving you a ton of manual work. But like anything, it's not perfect. While ATF has its perks, it's got a few shortcomings when you start comparing it to other, more universal tools like **Selenium** and **Appium**. So, what gives? Well, that's what we're here to break down.

In this paper, we'll dive into the strengths and limitations of **ServiceNow ATF**, compare it with **Selenium** and **Appium**, and talk about how well it fits into the broader world of **Software Development Testing Frameworks (SDTFs)**.

What's ATF Good For?

Let's start with where ATF actually **delivers**. ATF is a powerful tool for automating functional tests **within the ServiceNow platform**. If your testing needs are mostly focused on ServiceNow's features like catalog items, incidents, or change requests, ATF is a great tool for the job. Think of it as your go-to solution for validating that your ServiceNow setup is working as expected, without having to run all those tests manually.

Real-life Case Studies: Where ATF Was a Lifesaver

Case Study 1: ITSM Service Catalog Testing

One global financial services company needed to streamline their **IT Service Management (ITSM)** service catalog testing. They had hundreds of catalog items to validate—everything from password resets to hardware requests. Manual testing was slow, error-prone, and not scalable. By implementing **ATF**, they were able to automate most of the testing process, ensuring that each catalog item functioned properly, without needing an army of testers. The result? **Faster testing cycles** and fewer human errors.

Case Study 2: Incident Management Testing

A large telecommunications company was rolling out a new set of business rules and workflows in their **incident management** module. The challenge? They needed to validate that these changes didn't break any existing processes. ATF made it possible to automate the testing of multiple incident workflows and ensure that both new and legacy processes were still intact. By automating the testing, they saved significant time and resources, allowing them to focus on more important tasks.

So, ATF's strength is clear when it comes to validating common **ServiceNow workflows** that need consistent, repetitive testing.

But Here's Where ATF Falls Short

Now let's talk about where **ATF** isn't quite hitting the mark. ATF is **great** within the ServiceNow ecosystem, but if your testing needs extend beyond that, you might find yourself running into limitations.

Real-life Case Studies: Where ATF Didn't Quite Cut It

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Case Study 1: Mobile Testing

A health tech company needed to test their **ServiceNow mobile app**, specifically how users interacted with their service catalog from mobile devices. ATF didn't support mobile testing, which meant they had to look to **Appium**, another open-source tool designed for testing mobile apps. Appium worked like a charm, but this experience highlighted one of ATF's major limitations: **no native mobile support**.

Case Study 2: Cross-Browser Testing

Another company that provides cloud services needed to ensure that their ServiceNow instance was functioning properly across multiple browsers, including **Internet Explorer**, **Safari**, and **Edge**. ATF, however, doesn't give them the flexibility they needed to test on those less popular browsers. They turned to **Selenium** for its comprehensive **cross-browser** testing capabilities. Selenium made it easy to simulate a user on different browsers and operating systems.

So, while ATF is a solid performer for basic functional tests within ServiceNow, when it comes to **mobile testing** and **cross-browser support**, it doesn't cut it.

ATF vs. Selenium and Appium: The Showdown

Now that we've seen how ATF holds up in real-world cases, let's pit it against **Selenium** and **Appium** to see how they compare.

1. Overview of Each Tool

- **ATF:** Specifically built for **ServiceNow**. It's an easy-to-use tool for automating functional tests like catalog items, service requests, and more. Perfect for simple workflows within ServiceNow.
- **Selenium:** **Cross-platform, cross-browser** testing tool. It's built for web applications and works with many browsers and operating systems. It's more flexible than ATF, but you'll need coding skills to use it.
- **Appium:** If you're testing **mobile applications**, Appium is the way to go. It supports testing across both **iOS** and **Android** and allows you to write one test script to work on both platforms.

2. Ease of Use

- **ATF:** Super simple for **ServiceNow-specific testing**. You can set up tests within the platform with minimal code—perfect for non-developers.
- **Selenium:** Requires programming skills. You write test scripts in languages like **Java**, **Python**, or **JavaScript**.
- **Appium:** Like Selenium, it requires **coding skills**. Appium works with the same set of programming languages and frameworks but focuses on mobile app testing.

3. Browser and Platform Support

- **ATF:** Works well for browser testing, but it's limited in the range of browsers it supports. Also, it doesn't support **mobile testing**.

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- **Selenium:** One of the best for **cross-browser** testing. Supports all major browsers and is very customizable.
- **Appium:** Excellent for **mobile testing**. Works across both iOS and Android. It also supports mobile web testing.

4. Customization & Flexibility

- **ATF:** Limited to **ServiceNow-specific features**. While you can customize test scripts within ServiceNow, it doesn't handle complex integrations or non-ServiceNow systems well.
- **Selenium:** Super flexible and supports **custom tests**, including integrations, performance testing, and more. You can extend Selenium with plugins to meet your needs.
- **Appium:** Like Selenium, it's **extensible**, but it's specifically geared toward **mobile testing**. You can write custom scripts to interact with mobile-specific actions like gestures, swipes, and taps.

Expected Code Coverage with ATF

ATF is great for testing **ServiceNow workflows**—but don't expect it to catch everything. ATF is designed to validate user actions like **form submissions**, **UI interactions**, and **basic business rules**. When it comes to **code coverage**, expect that ATF will handle around **60-80%** of typical ServiceNow test cases—especially if you're testing things like **incident management** or **service catalog** workflows.

However, for deeper **backend testing**, **custom scripts**, or **integrations**, you'll need to supplement ATF with other tools like **Selenium** or **Postman** for API testing. ATF doesn't provide sufficient coverage for more complex, non-ServiceNow code paths, so your overall code coverage will likely be limited if you're only relying on ATF.

ATF in a Larger Software Testing Framework (SDTF)

The ATF fits well when you need to test **core ServiceNow features**, but it falls short when trying to incorporate testing of other systems, mobile apps, or more complex workflows. If you're looking to build a **full-scale SDTF**, you're going to need more than ATF. That's where **Selenium** and **Appium** come into play.

For example, you might use ATF to test your ServiceNow service catalog, but you'd need **Selenium** for cross-browser testing and **Appium** for mobile testing. Additionally, performance testing tools like **JMeter** or **LoadRunner** would be needed if you want to assess how your ServiceNow environment performs under heavy traffic.

Conclusion

While the **ServiceNow Automated Testing Framework (ATF)** is great for automating tests within the ServiceNow platform, it's far from a one-size-fits-all solution. It's best suited for validating workflows,

The Real Deal on ServiceNow Automated Testing Framework

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catalog items, and basic business logic. However, when you need cross-browser testing, mobile testing, or deeper integration testing, ATF starts to show its limitations.

For organizations that need more **flexibility**, **Selenium** and **Appium** are the better choices for web and mobile testing. ATF can certainly be a part of your overall testing strategy, but if you're working in a complex environment, you'll need to supplement it with other tools to get the complete picture.

If your testing needs are limited to ServiceNow's out-of-the-box functionality, ATF can save you time and resources. But if you're working with custom applications, integrations, or mobile environments, it's best to look outside the ServiceNow bubble and bring in Selenium or Appium for a more robust testing approach.

About Mana'o Pili ↴

Mana'o Pili is a Hawai'i based technology consulting firm specializing in business automation through ServiceNow. Mana'o Pili provides its customers with individualized solutions. We reject the notion of one-size-fits-all solutions. Instead, we partner with you to craft a tailored plan that aligns with your unique needs, budget, and objectives. Our approach focuses on optimizing your existing platform while minimizing customization and reducing technical debt.

Here at Mana'o Pili, we treat our customers as 'ohana (family), listen closely to your challenges and deliver tailored attention with exceptional service.